Clinical Lecture
ON
MEDIASTINAL TUMOURS.

Delivered in the Western Infirmary, Glasgow,

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GENTLEMEN,—The patient whom I am about to introduce to your notice presented a variety of symptoms of a somewhat unusual character, and his case is one to which attention may naturally be directed in connexion with my last lecture on intra-thoracic aneurism, for the disease under which he laboured is not unfrequently mistaken for it. He is a blacksmith, aged fifty-one, and was admitted on Feb. 9th, 1883, complaining of breathlessness and of swelling of the upper extremities. His family history is obscure, but he seems to have had two sisters, both of whom are dead, one of them having died after childbirth; while his father and mother reached the age of sixty-two. About twelve years ago, after exposure to inclement weather, he complained of a burning pain in the right infra-clavicular region, which does not appear to have been very severe, nor aggravated by respiration, and was unaccompanied by other symptoms; it was treated by means of the application of iodine to the chest wall, and disappeared in about a week. With this exception, he enjoyed good health until the beginning of the winter 1881–82, when he caught cold and was much troubled with cough and expectoration. These symptoms never entirely left him, although he was in great measure free from them during the greater part of last summer. He remained fairly well until about four months before admission, when, after an unusually hard day's work, he got a chill and suffered from shivers. He seems to have been feverish during that night, and the next day his cough became very troublesome, and continued so afterwards. From the onset of this last attack shortness of breath was increasingly complained of, until at last he was unable to lie down in bed. Two months before admission his hands and arms became swollen, but no other part of his body; and latterly he rapidly lost flesh, strength, and colour.

Let me now recall the results of our examination of this patient on February 16th. He was extremely emaciated, very weak, and anæmic; but he had no trouble with his digestive organs, and his temperature was normal. The urine was very scanty—three to twelve ounces in the twenty-four hours—high coloured; specific gravity 1033, and loaded with lithates; but it contained neither tube-casts nor albumen. His cough was troublesome; there were abundant frothy mucous expectoration and orthopnœa, but the pulse respiration ratio was not materially perverted. At the base of the right lung there was some fulness, marked dulness on percussion, feeble distant breath sounds, and diminution of the vocal fremitus and resonance. These symptoms led to the conclusion that there was considerable effusion of fluid in the right pleural cavity, an opinion which was strengthened by the circumstance that the liver was pushed downwards, and that it did not rise and fall with the respiration. But over and above these physical signs there were others which at once aroused our attention: (*a*) As in many cases of intra-thoracic aneurism the right radial pulse was weaker than the left; whereas in a state of health if there is any difference in the pulses at all the right is rather the stronger of the two, thus showing that there was some obstruction to the free passage of blood to the right upper extremity. (*b*) There was marked distension of the veins of the head, neck, arms, chest, and abdomen, indicating that there was some impediment to the free return of venous blood to the right side of the heart. (*c*) As a consequence of this there was œdema of the arms and hands, which was especially marked upon the right side, but there was no trace of it elsewhere.

Further, on examining the front of the chest, we observed flattening in the supra- and infra-clavicular regions, so that the clavicle seemed to project considerably, while there was a distinct prominence of the lower portion of the manubrium sterni, although the patient could not say whether this had occurred recently, or was a congenital malformation. Over the whole of this area, and extending about two inches to the left of the middle line, there was very great dulness on percussion—even more intense than over the pleuritic effusion at the base; the vesicular murmur was quite inaudible, but here and there distant tubular breathing was heard. These physical signs, coupled with the three symptoms previously mentioned, led to the suspicion that there was a tumour in the anterior mediastinum, which had encroached upon the right lung, and which was interfering with the free passage of blood to the right upper extremity, and with the return of venous blood to the right side of the heart.

As regards the nature of the tumour, we came to the conclusion that in all probability it was malignant—(1) because this is the most frequent form of mediastinal tumour; (2) because of the age and sex of the patient, such disease being most frequent in males and in persons who have passed middle life; (3) on account of the rapid development of the symptoms; (4) because of the signs of pleuritic effusion, malignant tumours being very apt to excite inflammation within the chest; and (5) because of the great loss of flesh and strength, and the cachectic appearance of the patient.

A good many cases similar to this one have from time to time come under my notice, two or three of which by way of comparison may be mentioned.

On November 11th, 1874, there was admitted an iron moulder, forty-four years of age, who enjoyed good health until twelve months before admission, when a slight cough set in, accompanied in a few weeks by expectoration, which gradually increased in amount, and six months afterwards having caught a severe cold, the cough became violent and the sputa streaked with blood, and after that time he frequently brought up small quantities of blood. About three months prior to admission he began to experience giddiness, oppression, and a sense of suffocation on making violent muscular exertion, especially on stooping, lifting heavy weights, &c., but these symptoms passed off on assuming the erect posture, or after resting awhile. About the same time slight puffiness of the neck was observed, and three weeks before admission, all his symptoms being aggravated, he was obliged to give up work. He never complained of headache, but on stooping or coughing his sight became dim, everything appearing as if in a mist. During his whole illness he occasionally felt a dull aching pain, sometimes of a burning character, shooting through from the right breast to the scapula, which was aggravated by hard work; and latterly on carrying his hand backwards towards his shoulder a pain seized him in front of the upper arm below the shoulder, and prevented him from completing the act. His general health seems to have been above the average, although he took stimulants pretty freely. On examining this patient's chest we observed that at the upper part of the right side anteriorly the movements of respiration were restricted, and that there was marked dulness upon percussion, which was not limited to the area of the lung, but extended across the sternum a little to the left of that bone. Over the whole of the dull space the vesicular murmur was absent, although at the apex tubular breathing and increased voice sound were present. These physical signs, coupled with the following four symptoms, led to the conclusion that there was a tumour in the anterior mediastinum. (1) The pulse at the right wrist was much more feeble than at the left. (2) There was marked dilatation of the superficial veins of the arms, head, neck, and top of the chest, especially on the right side. (3) In addition to the varicosity of the veins there was distinct œdematous swelling of the neck. (4) The breath sounds over the base of the right lung were very much feebler than on the opposite side.

Some years ago there was admitted under my care in the Royal Infirmary a ship carpenter, aged thirty-two, who gave the following account of himself:—In the month of February, while at sea, he was a good deal exposed, sometimes having his clothes wet for a whole week. About this time he began to cough a little, and the cough never left him, although he improved a good deal under treatment during the summer months. In April shortness of breath set in, with general pain over the front of the chest, shooting through to between the shoulders. At this time, too, the veins of the right side of the neck and chest became distended, and the face gradually assumed a swollen and dusky appearance. During the spring he fainted three times at intervals of some weeks, on each occasion after drinking a cupful of cold water. All the above symptoms had been on the increase for three months preceding his admission. He was unable to lie

upon his back, but breathed pretty freely sitting up, or upon either side, especially the left.

On examining his chest we found in the first place that there were the usual physical signs of moderate catarrh of the bronchial tubes, the cough being accompanied with some muco-purulent expectoration, but there were a great many very striking symptoms besides. For we found, on listening to the breathing on the two sides, that it was decidedly louder and more marked upon the right side than upon the left. On inspecting the front of his chest, too, the movements of respiration, particularly at the upper part, were found to be defective. There was marked dulness and increased resistance upon percussion over the whole of the sternum, more marked above, and not only over the sternum, but to a considerable extent on each side of it, especially to the left, in which direction it extended at least two inches. We noticed, likewise, that the upper part of the sternum was somewhat prominent. On placing the hand upon the chest over the dull area, and making the patient speak, the vocal fremitus was observed to be almost entirely absent, and on applying the stethoscope the respiratory sounds could hardly be heard. Then we endeavoured to find out the situation of the apex beat, but failed to discover any at all. On applying the stethoscope, however, over the præcordial region, the sounds of the heart were clear and pure. They were most distinct over this region, which led to the supposition that there was no very great dislocation of the heart. On feeling the pulses at the wrists it was noted that the left was weaker than the right. But the most remarkable symptom having reference to the organs or circulation was the enlargement of the superficial veins of the face, neck, chest, and abdomen, particularly of the front of the chest and abdomen, and which was more marked upon the right side than upon the left. The most distressing symptom in this case was dyspnœa. The patient could breathe best when he was sitting up in bed, and pretty freely when lying upon either side, especially upon the left, but it was quite impossible for him for any length of time to lie upon his back with his head low, the dyspnœa became so urgent. Another feature was hoarseness, which had been observed for about three months; and there was this peculiarity about it—that if we made him turn his head to the right shoulder his voice was comparatively clear, but if towards the left, then the hoarseness became decided, and if we made him lie upon his back with his head low his voice became extremely husky. A laryngoscopic examination showed that there was congestion, but no paralysis, of the vocal cords. These symptoms and physical signs pointed to the conclusion that there was a tumour in the anterior mediastinum.

A short time since I saw a somewhat similar case in consultation with Dr. Wm. Pearson. This patient, a female, aged forty-nine, began to complain of pain to the right of the middle of the sternum, which, about nine months prior to my visit, extended up to the right shoulder. This was followed by a hard irritative cough, which was soon accompanied by slight frothy and occasionally tough mucous expectoration. To these symptoms were added distension of the superficial veins of the right side of the neck and face and right arm, and œdema, which was aggravated by exertion. At the time of my seeing her, the cough and expectoration and pain of chest continued, and she had dyspnœa to such an extent that she could not lie down with comfort. The breathing over the whole chest was harsh, but air entered both lungs with equal freedom. There was distinct prominence, associated with dulness on percussion, of the upper part of the sternum, and at the right supra-scapular region the percussion was less clear than at the left. The voice was hoarse, but the pulses were equal on the two sides, and the pupils were unaffected.

But, to return to the case with which we commenced, we felt very powerless as to even palliative treatment. We hoped, however, that by removing the fluid from the pleural cavity there might be some mitigation of the dyspnœa. This was accordingly done on February 16th, twenty-six ounces of inflammatory serous fluid being withdrawn with the aid of Southey's trocar. This, however, was not followed by any diminution of the dyspnœa, showing that it was dependent upon the pressure of the tumour, and little if at all upon the pleuritic effusion. Death put an end to the sufferings of the patient two days afterwards, and on February 20th a post-mortem examination was made by Dr. Joseph Coats, pathologist to the infirmary, with the following result.

The lower limbs show considerable emaciation. There is marked œdema of both upper limbs, especially in the right hand and forearm. Chest: The heart is of normal size. The mediastinum is occupied by a bulky tumour which extends considerably more to the right than to the left side; taking rough measurements it may be said that the tumour in its thickest part extends four inches from before backwards, and five inches from side to side. The main mass of the tumour is in the fork formed by the bifurcation of the trachea, and more behind than in front; but the mass which involves the great veins is somewhat separated from the main mass and is almost equal in size. On opening the pericardium it is seen that all round at the place of issue of the great vessels, the pericardium is involved in the tumour, whose whitish-grey tissue has replaced it, and projected into the sac in lobulated masses. There is no considerable extension to the heart itself, but at the auricles the tumour tissue approaches very near to, and on the left side does involve slightly, the wall of the auricle. On the other hand, the superior vena cava on the one side, and the pulmonary veins on the other, have their walls infiltrated and their calibre somewhat encroached on by the tumour tissue. The contraction from encroachment of the tumour is considerably greater in the case of the superior cava and right pulmonary than in the left pulmonary vein. On tracing up the superior cava its wall from the orifice to its division is completely occupied by tumour tissue, and its continuation upwards into the right innominate and internal jugular is similarly involved. The left innominate and right internal jugular are entirely occluded by thrombi. The right subclavian vein cannot be traced to its junction with the innominate, its wall being apparently converted into tumour tissue and its calibre filled up. Beyond this the vein is occupied, but only for a short distance, by a thrombus. The left branch of the pulmonary artery is not involved in the tumour mass, but the right branch passes through a considerable thickness of it, and its calibre is obviously narrowed; but it is not determined whether its wall is actually involved or not. The aorta is not affected by the tumour. The left phrenic nerve in passing down in front of the root of the lung is impinged on by a projecting piece of the tumour and partly involved in its tissue. The extreme lower part of the trachea and both main bronchi have their walls partly replaced by tumour tissue, which presents itself internally in the form of rounded whitish nodules. The right main bronchus is much more involved than the left, and for a certain distance its wall is undistinguishable from the main tumour; the tumour also extends a short distance into the lung, along the bronchus and its primary branches. On examining the arteries, it is found that the right subclavian carotid and innominate lie for the most part behind the mass of the tumour. The subclavian is nearer, and would be more pressed on, but it is not embedded in the mass. A microscopic examination showed that the tumour was a lympho-sarcoma.

ON THE

DEVELOPMENT AND COAGULATION OF THE BLOOD.

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(*Continued from p. 178.*)

On the relation of the colourless disc to free hæmoglobin in the liquor sanguinis.—Allegations have been made to the effect that "so long as the liquor sanguinis remains colourless—i.e., to the eye—not a single transparent (? colourless) corpuscle can be found; ..... that the colourless corpuscles (discs) can only be found when in the same preparation the liquor sanguinis is tinted; ..... that the colourless discs when not present appeared as usual when the hæmoglobin began to be effused from the corpuscles; ..... that the colourless discs being simply red corpuscles which have lost their hæmoglobin this substance may be found again by means of the micro-spectroscope in the serum, filtered off on the other side of the Newton's rings." I might content myself by giving to these statements the most specific and unqualified denial. I can unhesitatingly affirm that the colourless discs can be seen adhering to the slide, and modifying the

form of the red discs, which impinge against them (impact method), within a few seconds of the blood being shed while all is in active motion, and this in specimens which do not for hours subsequently to the observation show the slightest tint of hæmoglobin. Further, I have examined the blood countless times, in which the invisible disc has been displayed by the packing method, with a view to detect hæmoglobin, and have also to this end repeatedly applied the micro-spectroscope to the pure liquor sanguinis, which has been filtered off by the barrier method, without discovering the slightest trace of this substance. I have also used the far more delicate photogenic tests with a like result, and I am therefore prepared to say that each and all of these allegations are baseless, and have no foundation in accurate experiment or observation. I shall not, however, rest satisfied with a simple denial of these allegations, but shall endeavour to show, in as complete a manner as possible, how very unsatisfactory and unnecessary these attempts in reality are to make the appearance of the colourless disc contemporaneous with the visible presence of hæmoglobin in the liquor sanguinis. A knowledge of the true state of the case would have enabled my critic to realise the fact that if the colourless discs originate by decolourisation of red discs, they ought indubitably to be present in the blood, in far greater numbers than they are ever found, and that at a period long anterior to the visible tinting of the liquor sanguinis with hæmoglobin. It is a comparatively easy task to ascertain the visual, spectroscopic, and photogenic value of the various percentages of solutions of blood in water, and to compare these with the blood serum, and, as in the former case, we know pretty accurately the number of red discs which have been decolourised to yield certain definite visual, spectroscopic, and photogenic effects, so we can state with certainty how many discs should become decolourised in the blood serum to give parallel results; in other words, we can ascertain the percentage of free hæmoglobin present in any specimen of blood, and the number of red discs which must yield up their hæmoglobin to produce it.

In accordance with my views of the mode of distribution of the hæmoglobin among the discs of the blood, there exists as a normal condition, in every cubic millimetre of blood, or in association with every 5,000,000 red corpuscles, about 84,000 discs, which are free from colour, and which represent discs which have very recently passed into the blood current from the lymphatic system. If I am wrong in this view, and it be true, as some aver, that these colourless discs are not derived from the lymphatics, but are merely decolourised red discs, it follows of a necessity that the colouring matter which these discs once possessed has now entered into the liquor sanguinis, and it is therefore a matter of some importance to be able to detect in this liquid minute quantities of hæmoglobin, not that the presence of this substance would at all prove that the colourless discs were decolourised red discs, because it is most likely furnished by small increments derived from the whole of the red discs, and not by the total decolourisation of a few; but, on the other hand, the absence or deficiency of hæmoglobin would positively demonstrate that the colourless discs could never have been discs in possession of colour, or, as some have asserted, mere stromata of red discs. In brief, while the presence of hæmoglobin in the liquor sanguinis is no evidence that the colourless discs are decolourised red discs, its absence would afford positive proof to the contrary. I have therefore sought to determine whether specimens of blood can be obtained which, while exhibiting the colourless discs, possess a liquor sanguinis which yields minute reactions only with hæmoglobin tests of exquisite delicacy. The three practically available modes of detecting hæmoglobin are the visual, the spectroscopic, and the photogenic. If all eyes were equally good in the appreciation of delicate tints of colour, the visual test would be a little in advance of the spectroscopic; in other words, a solution of hæmoglobin which in a given thickness would yield faint absorption bands of oxy-hæmoglobin would, when contrasted with pure water, be easily appreciable by the sight. I find that the spectroscope will give very faint oxy-hæmoglobin bands in a $\frac{1}{4}$ per cent. solution of blood in water, in a thickness of one millimetre, and that a single layer of blood corpuscles, lying flatways, and in close approximation to each other, gives bands of much greater intensity; the $\frac{1}{4}$ per cent. in reality compares with blood in which the corpuscles lie flatways, but are not very closely approximated. In respect to the photogenic test, it is well known that pure iodide of silver is sensitive to the ultra-violet, to violet, and to the blue rays, and insensitive to the yellow, red, and ultra-red rays of the spectrum. Now hæmoglobin is a brownish- or yellowish-red colouring matter, and therefore reflects and transmits mainly rays of the colour to which iodide of silver is insensitive; if then we interpose between the light and the sensitive iodide plate different thicknesses of its solution, we cut off more and more the photogenic power by filtering out the violet and the blue rays. This is practically carried out as follows:—A hollow prism or wedge is taken one millimetre in breadth at base (inside measure), the sides of which have such a length that when the prism is divided into fifteen parts the middle division shall represent one-half and the last division near the apex one-fifteenth of a millimetre. If we fill this hollow prism or wedge with a $\frac{1}{4}$ per cent. solution of blood, the oxy-hæmoglobin bands are faintly seen at its base, or at the fifteenth division. If we now place before the prism an opaque mask, with slits or spaces corresponding to the divisions, and expose for a few seconds to a plate of iodide of silver, by means of transmitted light from a source that is equally illuminating, the exposure being just sufficient to obtain an image of the fifteenth division at the base, we shall find that photography is capable of indicating a smaller amount of hæmoglobin by fifteen times than the spectroscope. As the determination of the relative power of the spectroscopic and the photogenic test for hæmoglobin is one of considerable moment, it has been thought well to verify the conclusions obtained by the wedge by another method. In the case of a wedge with one millimetre base the glasses approximate so closely at the thin end as to render it possible that the unavoidable inaccuracies of the flattest glass obtainable might be a source of error. An arrangement has therefore been devised which is not open to this possible objection. A glass trough is constructed, two millimetres in width in every part, and divided up into fifteen equal divisions or compartments; a standard solution of blood is taken, which will give the absorption bands in a thickness of two millimetres of the same intensity as before. The strength of this solution will be $\frac{1}{8}$ per cent. Into the first compartment of our glass trough we place one part of blood solution and fourteen parts of water, into the second compartment two parts of blood solution and thirteen parts of water, into the third three parts of blood solution and twelve parts of water, and so on till we come to the last or fifteenth compartment, which will contain the original blood solution undiluted, or $\frac{1}{8}$ per cent. The dilutions of the $\frac{1}{8}$ per cent. solution of blood will therefore run thus:—1 in 15, 2 in 15, 3 in 15, 4 in 15, and so on, and will represent $\frac{1}{120}$ per cent., $\frac{1}{60}$ or $\frac{2}{120}$ per cent., $\frac{1}{40}$ or $\frac{3}{120}$ per cent., $\frac{1}{30}$ or $\frac{4}{120}$ per cent., and so on to $\frac{15}{120}$ or $\frac{1}{8}$ per cent.; thus we see that the strength of the solution is increased $\frac{1}{120}$ per cent. in each successive compartment. As we can practise these dilutions in large quantities, we can readily get the equivalent of the wedge without its possible errors; this arrangement, when photographed, yields us the same result as is obtained by the wedge, enabling us to detect $\frac{1}{120}$ per cent. of hæmoglobin in two millimetres thickness, which is the equivalent of $\frac{1}{240}$ per cent. in one millimetre, and supports our previous conclusion, that the photogenic test is fifteen times more sensitive than the spectroscope. We possess now several data upon which we can reason, and from which we can draw legitimate and valuable conclusions.

1. A single layer of closely approximated blood discs is about $\frac{1}{3500}$ of an inch, or $\frac{1}{140}$ of a millimetre thick, and gives distinct oxy-hæmoglobin bands, therefore a layer of blood solution of the same thickness and intensity of colour will also give distinct bands.

2. A $\frac{1}{4}$ per cent. solution of blood, when a millimetre thick, gives the bands more feebly, of, in fact, about the same intensity, as a single layer of blood discs, having normal intervals of liquor sanguinis.

3. Photography will detect hæmoglobin in a solution of fifteen times less intensity than this in the same thickness—viz., $\frac{1}{15}$ per cent. in the thickness of a millimetre.

4. In a single layer of blood discs, with normal intervals of liquor sanguinis, the intensity of the hæmoglobin must therefore be 400 times greater than a $\frac{1}{4}$ per cent., because a thickness of $\frac{1}{3500}$ of an inch is equal to $\frac{1}{140}$ of a millimetre.

5. The percentage of blood therefore required to show the bands in a thickness of $\frac{1}{3500}$ of an inch, about the thickness in which the blood is examined under the packing-glass or mica-cover, is about 100 per cent.

6. As photography is, as shown by the wedge and glass trough experiments, a superior test by fifteen times to the

spectroscope, it would therefore detect hæmoglobin in a 6⅔ per cent. solution of blood of the thickness of $\frac{1}{150}$ of an inch, or of $\frac{1}{100}$ of a millimetre. If therefore a specimen of blood prepared for microscopic examination become charged to this extent with hæmoglobin, photography would at once show it, but would be incapable of showing any less percentage.

All arguments, therefore, based upon the existence of hæmoglobin in the liquor sanguinis in these thin strata are utterly valueless, for we have seen that we have no means of detecting hæmoglobin under such conditions, till it reaches 6⅔ per cent., and that consequently we are unable to say whether or no it exists below this per cent. either as a normal constituent or otherwise of the liquor sanguinis. Now, as there are 5,000,000 corpuscles in a 1 per cent. solution of blood, to get at the number in 6⅔ per cent., we must multiply 5,000,000 by 6⅔; this gives us 33,333,333. To get at the number of corpuscles in 1 cubic millimetre of this solution we divide by 100, which gives us 333,333⅓, the number of corpuscles which must undergo solution in the liquid of a cubic millimetre of blood, to give it the strength of 6⅔ per cent., and to enable hæmoglobin to be detected by photography, in a thickness of $\frac{1}{150}$ of an inch, or $\frac{1}{100}$ of a millimetre. Now, we have seen that the photogenic test is fifteen times superior to the spectroscopic; hence to ascertain the capacity of the spectroscope in relation to this thickness, we must multiply 333,333⅓ by 15, which gives us close on the 5,000,000 corpuscles, or the 100 per cent., as the number of corpuscles which must undergo solution before the absorption bands put in an appearance, and as the power of vision in detecting hæmoglobin is somewhat better only than the spectroscope, we see how utterly beside the mark such a statement must be, that not a single transparent (colourless) disc can be found so long as the liquor sanguinis remains colourless. Seeing that over fifty times the number of decolourised discs than I claim colourless discs would be present in the blood before the liquor sanguinis became perceptibly tinted to the eye, supposing the hæmoglobin of certain corpuscles to be undergoing progressive solution. The truth is that no means exist of sufficient delicacy to enable us to affirm that no hæmoglobin is present in a layer of liquor sanguinis $\frac{1}{150}$ of an inch in thickness, and it is only by increasing the thickness of these layers that any result whatever can be arrived at. The visual, the spectroscopic, and the photogenic tests are all capable of detecting the most minute traces of hæmoglobin, providing the layer of liquid investigated can be progressively increased in thickness. The difficulty lies entirely in the extreme tenuity of the layer, with which we are compelled to operate, except in the case of dilutions, and as all so-called preservative diluents may be more or less destructive in comparison with absolutely normal conditions, their use is perhaps not quite so good as if we could test pure unaltered liquor sanguinis in a layer of appropriate thickness. The solution of sulphate of soda having been found to be the best preservative, it was determined to make a series of very careful experiments with a view of ascertaining the amount of hæmoglobin set free, and the number of corpuscles this would be equivalent to, on the hypothesis that it was yielded by certain specially unstable discs. A cubic millimetre of blood was added to 100 cubic millimetres of a 5 per cent. solution of sulphate of soda, and after the corpuscles had subsided, which usually took several hours, the clear liquid was compared by means of the spectroscope, with a standard ½ per cent. solution of blood in water, of a thickness of one millimetre. In the first experiment a thickness of eighty-four millimetres of the solution of sulphate of soda was required to yield bands of equal strength to the standard solution of blood. As a ½ per cent. solution has dissolved in it 2,500,000 red discs, this number divided by 84 will give the number of red discs which by their total solution would yield the equivalent of the free hæmoglobin present—viz., 29,762. In this case the blood and the sulphate of soda had been in association for over twenty-four hours; and as it takes but a few seconds to determine the presence of the colourless discs in such a mixture, it was thought worth while to inquire what the result would be if the sulphate of soda was taken from off the blood more quickly. To do this the experiment was carried out in the following manner:—Six cubic millimetres of blood were added to 600 cubic millimetres of a 5 per cent. solution of sulphate of soda, equal to 1 per cent. This quantity was then divided up into four parts, and allowed to settle; the clear liquid was then removed, and was found to give the bands equal to a solution of blood of $\frac{1}{150}$ per cent. The corpuscular loss therefore in this case would be about 12,500 red discs. In a third, and most carefully managed, experiment it was found necessary to take 340 millimetres of the sulphate of soda solution from which the blood had settled to yield the absorption bands, equal in intensity to a ½ per cent. solution of blood one millimetre in thickness; hence, if we divide 2,500,000 by 340, we get 7353$\frac{7}{17}$, the number of corpuscles which must be dissolved to produce a solution of this strength—viz, about $\frac{1}{7}$ per cent. If the corpuscles which have subsided from these preservative solutions are examined microscopically, the colourless discs are found by any of the methods to be present in their usual numbers. The amount of free hæmoglobin therefore present in this latter case, in a layer $\frac{1}{150}$ in. or $\frac{1}{100}$ millimetre thick, is about 4667 times less than photography is capable of detecting in a layer of this thickness, and about 69,99¢ times less than can be detected under similar conditions by the spectroscope.

These experiments serve to show that the free hæmoglobin present is incompetent to account for the colourless discs, for even when preservative diluents are used the amount can be reduced to a minimum without interfering with the number of these discs, which require for their explanation, on this hypothesis, an amount of hæmoglobin equal to that derived from the destruction of no less a number than 84,745 red discs, whereas the amount demonstrated to be present is that which would be yielded by 7353 red discs only, or about $\frac{1}{7}$ of the required amount, besides which we must not, because we are able to detect in a preservative liquid to which 5,000,000 red discs have been added, an amount of hæmoglobin which would be yielded by 7353 red discs, therefore infer that this number of discs has been decolourised or rendered invisible, because this amount of hæmoglobin has, in all probability, been derived from the great mass of corpuscles rather than from any in particular, and, if so, the loss by individual corpuscles would be infinitesimal and inappreciable, and might not involve the actual disappearance of a single red disc.

From what has been said it is quite obvious that the statement that the "colourless discs do not appear until hæmoglobin presents itself in the serum" is entirely without foundation, and by proving too much is inconsistent even with the hypothesis it is put forward to substantiate as to the origin of these discs, because, if they are so derived, they should be present in their usual numbers long before the liquor sanguinis contains an amount of hæmoglobin detectable even by photography, and much less by the sight or by the spectroscope; and, on the other hand, when the liquor sanguinis is visibly tinted by hæmoglobin they should be present in numbers far exceeding the normal or those in which they are actually present; in other words, their number should vary proportionately with increase or decrease of the free hæmoglobin. To put the matter clearly, in the experiment in which the free hæmoglobin is equal only to the solution of about 7000 red discs, there should be present only this number of colourless discs to the cubic millimetre, a mere fraction of the number normally present under these circumstances—viz., 84,745. On the other hand, in a case in which hæmoglobin can in these thin layers be seen, or be detected by the spectroscope, nearly the whole of the 5,000,000 red discs should undergo decolourisation and display themselves as colourless discs.

In connexion with this tendency of the liquor sanguinis to become coloured, the question may naturally be entertained as to whether the discs which contain the greater or the lesser amount of hæmoglobin will be the first to yield it up. As a general principle faint tinges of colour are held more tenaciously, and we also know that there comes a time in the history of the red disc when, being fully coloured, it undergoes solution, and it does not seem irrational to suppose that discs which are preparing for and approaching this change should be more prone, under the influence of slight causes, than younger or less coloured ones to yield up their hæmoglobin. On the other hand, if, as I contend, the biconcave discs are a graduated series from colourless to full red, and if it should transpire that under abnormal conditions they all give up a small but equal increment of hæmoglobin, it will follow that those nearest in position to the colourless will be liable to become confounded with them, and be added in fact to the invisible set, thus giving an incorrect idea of their true numerical relation in normal blood, but not in any way leading us astray as to the actual constitution and mode of development of the blood discs. Indeed this way of looking

at the question involves the admission of all I claim—viz., the existence of an invisible colourless disc as a normal constituent of the living blood, which gradually becomes visible by the acquisition of colour.

The reader will by this time have learned to appraise at its true value the statement that the colourless discs are produced by pressure, exerted by the proximity of the glasses near to the rings of Newton, which causes them to give up their hæmoglobin, and "which substance may be found again by means of the micro-spectroscope, in the serum, filtered off on the other side of the rings." Knowing from repeated trials that this statement was inaccurate, when experiments of this kind were properly performed, I requested my friend Dr. M'Munn to examine spectroscopically the liquor sanguinis filtered off from the corpuscles in the vicinity of the colourless discs, which he did most carefully, with a negative result.[1] How, indeed, could it be otherwise in the face of the fact that the blood can be in contact with a 5 per cent. solution of sulphate of soda for over two hours, and remain so free from hæmoglobin that a thickness of 340 millimetres gives absorption bands only equal in distinctness to a $\frac{1}{2}$ per cent. solution of blood one millimetre thick? And as a $\frac{1}{4}$ per cent. solution of blood one millimetre thick is the strength and thickness in which the bands are barely detectable, if we divide 340 by 2 we get the thickness of the solution which is required for this amount of hæmoglobin to be detectable by the spectroscope—viz., 170 millimetres. As the microscopic specimens in question are about $\frac{1}{1000}$ of an inch or $\frac{1}{40}$ of a millimetre in thickness we must multiply 170 by 400 to get at the number of microscopic specimens of this liquid, it would be necessary to superimpose, to detect the faintest evidence of the oxy-hæmoglobin bands—viz., 68,000. As this blood was originally diluted 100 times we can, by dividing 68,000 by 100, get at the actual number of microscopic specimens of pure blood which it would be necessary to superimpose to detect this amount of free hæmoglobin—viz., 680. It may perhaps be as well to add that the blood in which this minimum amount of hæmoglobin is set free can be shown by any of the methods old or new, to possess the usual number of colourless discs, about 1 to 60 red ones, or about 84,000 to the cubic millimetre. It is seen, therefore, that the better the blood is preserved the clearer my case is made out, and I shall hail with satisfaction the discovery of any diluent which can be shown to be *absolutely* preservative of the red discs.

Colloid method.—In my recent work on the physiology and pathology of the blood I have described under the designation of the "colloid method" a plan of preserving the blood in which I have great confidence. It consists in increasing the colloidality of the liquor sanguinis by dissolving in it dry soluble albumen. I have found that specimens of blood prepared in this manner will remain unchanged for a great length of time. Such specimens readily show the colourless discs by any of the methods, and no change takes place either in the liquid or in the corpuscles even after keeping for twenty-four hours or longer. The experiments were conducted as follows:—Two specimens of blood were taken, to one dry soluble albumen was added. They were both placed under similar cover glasses, and kept under precisely the same conditions for eighteen hours. Colourless discs were present in both these specimens immediately upon their preparation. At the expiration of eighteen hours they were both compared; the one to which the colloid had not been added had its liquor sanguinis so discoloured that if the red discs were not actually dissolved the liquid around them was so coloured up to a like intensity with them that they were no longer to be seen. These specimens were subsequently photographed. (*Vide* photographs 50, 52, 53, and 54.) The specimen to which the colloid is added not only does not show when visually examined any hæmoglobin, but does not exhibit the slightest evidence of its presence by photography, which we have seen to be a much severer test than the visual or spectroscopic. Now, the companion specimen (photographs 53 and 54) has in the same time yielded to the liquor sanguinis something like 50 per cent. of colouring matter for the whole of its corpuscles have disappeared. In the colloid specimen (photograph 50) we know from the form of the red corpuscles and from the thickness of the walls of the air bubbles present, that the glasses are about $\frac{1}{1000}$ of an inch apart, and that therefore we could detect by photography in this thickness a solution of blood of about 3 per cent., hence we know that after keeping eighteen hours this specimen has not accumulated an amount of hæmoglobin equal to this. The specimen has therefore been preserved infinitely better than the simple blood, and seeing that it does not at the expiration of so long a time contain a detectable amount, and that during this period no change appreciable under the microscope has taken place either in its corpuscles or in its liquor sanguinis, it is a fair inference that it contained, when the colourless discs were first seen a few moments after its preparation, scarcely any, if any, hæmoglobin. My critic has endeavoured to get rid of this crucial test by referring to photograph 52 instead of photograph 50, and stating that "it would be difficult for any unbiassed person to detect in it the presence of a single colourless corpuscle." This is quite true of photograph 52, which neither in the text nor in the description of the plates is put forward with such a view, for the corpuscles are not here packed together. I must again remind my critic that it is photograph 50 which has to be reckoned with.

(To be continued.)

[1] In the discussion which followed, Dr. McMunn of Wolverhampton, after referring to the account given by Dr. Norris of the action of osmic acid on the blood and the production thereby of methæmoglobin and hæmatin, said he considered it due to Dr. Norris to mention that he had made the following experiment:—A microscopic slide having been prepared with blood a space was selected free from corpuscles, but which were grouped round its edge, and displayed among them the colourless discs. In this space, which contained only liquor sanguinis, he could not detect by any method a trace of even the first blood band, while in an equal depth of blood corpuscles both bands were plainly discernible.

ON A CASE OF

PAROSTEAL SARCOMA OF THE RADIUS.

By HENRY T. BUTLIN, F.R.C.S. Eng.,

ASSISTANT SURGEON AND SURGEON FOR THE DISEASES OF THE LARYNX, ST. BARTHOLOMEW'S HOSPITAL.

THE term parosteal is here employed in the sense in which it is used in Virchow's "Krankhaften Geschwülste,"[1] to denote a tumour growing by the side of a bone, probably from the outer surface of the periosteum. Such a tumour is easily distinguished from a subperiosteal tumour; for, while the one leaves the periosteum unbroken and closely adherent to the bone, the other raises it off the bone, erodes and destroys the compact tissue, and often penetrates into the medulla or cancellous tissue.

Parosteal sarcomas are, I believe, by no means common. Among a large number of sarcomas of various bones which I have had the opportunity of examining, I have only met with two or three instances. Partly on this account, but chiefly on account of the difference which appears to exist between these tumours and those which grow beneath the periosteum, the following case appears worthy of publication. I must thank my colleague, Mr. T. Smith, for the permission to use it, for although I first saw the patient, and operated on him, it was during Mr. Smith's absence from town.

C. E——, aged twenty-four, a railway porter, a strong and healthy-looking man, was sent to St. Bartholomew's Hospital by Mr. Hall of Tottenham on April 8th, 1882. On the radial side of the left forearm, about midway between the elbow and the wrist, was a tumour as large as a small fist, but lobed and elongated. It presented towards the front, as well as on the outer side. The tumour was tense, fluctuating on the outer side, but firm towards the front; the skin covering it was stretched, but not discoloured. In the axilla was one enlarged gland about the size of a small nut. The man said that for four months he had been conscious of the presence of a lump in the forearm; but it had grown very slowly, and without pain, and therefore had not prevented him from pursuing his occupation, until about six o'clock on the previous evening, when suddenly, without warning and without any evident cause, it began to enlarge, and in less than half an hour had doubled its previous size. The enlargement was accompanied with excessive pain, which at once rendered him incapable of continuing his work, and compelled him to seek advice. The diagnosis was sarcoma of the radius, probably subperiosteal, which had enlarged from sudden hæmorrhage. He was put to bed, the arm laid on a rest, and cooling lotions were ap-

[1] Band ii., s. 91 and s. 341.

plied. But the pain continued unabated, and on April 10th was so intense as to call for active treatment. A consultation was held, and two of my colleagues who were in the hospital agreed in the diagnosis, and in the urgent necessity for operation. Half an hour later, after an Esmarch's bandage had been applied, I made a free incision into the tumour, turned out a large quantity of blood-clot and soft tumour substance, and found, contrary to what had been expected, that the bone was nowhere bare. The sac which contained the tumour was everywhere perfectly smooth-walled, except where the solid tumour was lightly adherent to it, and lay deep down between the muscles and around the radius, over which the periosteum lay smooth and closely adherent. Had the tumour been subperiosteal I should at once have amputated, but the immunity of the bone from disease and the smoothness of the cavity in which the tumour was enclosed tempted me, in spite of the malignant aspect of the new growth, to scoop it out and try to save the limb. One of my colleagues was decidedly of the same opinion. Every visible and tangible particle of the growth was therefore carefully removed, the cavity was sponged out with a solution of chloride of zinc (forty grains to the ounce), a drainage-tube introduced, and the operation concluded. The patient made a good recovery and returned to his work with a perfectly useful limb. In October he was again admitted into the hospital for the removal of a recurrent growth, which had been springing up during the past few weeks in the deep tissues on the ulnar side of the scar. The enlarged axillary gland had entirely subsided. The growth was removed by Mr. Smith, who dissected it out from amidst the muscles. It was not so clearly defined as on the first occasion. The patient again recovered speedily, and was able to resume his work, the movements of the limb being unimpaired. On May 16th, 1883, Mr. Smith removed a second recurrence, much smaller than the first and seated in the fascia covering the superficial flexors. The deeper parts were not affected, and even the surface of the muscle was not invaded. The operation was therefore trivial, and the patient quickly recovered.

A microscopical examination of the tumours showed that they were chiefly spindle-celled, but contained also numerous bodies like elongated nuclei, and round cells. The disease was, therefore, a spindle-celled or mix-celled sarcoma. It is, of course, too early yet to claim success for the conservative treatment which was adopted in this case. But thus far the result appears to justify the attempt, I might almost call it the experiment, to save the limb. The appearance of the first tumour was that of a medullary cancer which had been bled into, and the situation of the disease made it almost certain that it was a round- or spindle-celled sarcoma. I have already said that if it had been subperiosteal I should at once have amputated. It may be asked why an attempt was made instead to scoop the tumour out. To this the reply is that the information we possess regarding the malignancy of subperiosteal sarcomas is sufficient not only to justify but to call for amputation; that, on the other hand, our knowledge of the properties of parosteal sarcomas is very slender, but there is some reason to believe that they are not so malignant as the subperiosteal tumours. We have been too much in the habit of regarding all spindle-celled sarcomas, or all round-celled sarcomas, no matter what part they affect, as equally malignant and requiring similar treatment. I have endeavoured to show[2] that this is not the case, and that the malignancy of sarcomas of the same kind depends very largely on their situation. The malignancy of subperiosteal round, and spindle-celled sarcomas of the radius and ulna is much less than that of subperiosteal round, and spindle-celled sarcomas of the humerus. The malignancy of central sarcomas of the radius and ulna is much less than that of subperiosteal sarcomas of the radius and ulna; the former may be safely treated by excision or scooping out, the latter require early amputation. From many facts of the same kind it is quite clear that the application of general rules to the treatment of malignant disease of all parts of the body is of very little use, and that it is absolutely necessary that the malignant diseases of every part should be studied separately. The comparative malignancy of parosteal tumours is still unknown, and the treatment is therefore experimental. I can shortly recall one or two instances which tend to prove that they are less malignaut than subperiosteal tumours of the same parts of the body.

A woman, aged fifty-five years, suffered amputation for a parosteal sarcoma of the ulna, which had projected through the skin and appeared as a very malignant mass on the inner aspect of the forearm. She died from causes connected with the amputation; and the post-mortem examination showed that the lymphatic glands and viscera were quite free from secondary disease. Yet the tumour had existed more than two years, and was an excellent example of spindle-celled sarcoma.

At a recent meeting of the Pathological Society,[3] Mr. George Lawson exhibited a tumour which appeared to have grown from the outer surface of the periosteum of the lower jaw. This tumour was a sarcoma composed chiefly of spindle cells, and was the eleventh recurrence, ten previous tumours having been removed during a period of many years, the first by Sir William Fergusson, the last by Mr. Lawson. The few cases of subperiosteal sarcoma of the lower jaw I have been able to collect have run a very different course from this. Of two cases of spindle-celled sarcoma, of which the result was known, one patient died at the end of twenty-eight weeks, the other within a year. The parosteal tumour of the bones of the forearm may be compared with the cases of subperiosteal tumours of the forearm in the tables in my book on Sarcoma and Carcinoma (page 68). To the cases there tabulated I can add another, which has just been treated in the hospital by Mr. Smith. The patient was a woman, aged twenty-seven, who had noticed a swelling in the forearm only about six months, but had felt pain for a much longer period. She appeared generally a healthy person and presented no signs of constitutional disturbance. About the middle of the right forearm, and presenting chiefly on the outer side, was a fusiform tumour about five inches long, firm and smooth. The skin was not affected and the glands were normal. On July 20th the tumour was cut into, and removed by cutting and scooping. Three inches of the radius, where it was bare of periosteum and rough, were also removed. The growth, like the recurrent tumour in the first case, infiltrated the muscles. It bore all the general characters of a soft cancer without cysts and without capsule. It consisted largely of fibrous tissue, in the meshes of which were numerous round and oval cells, and I regarded it as a fibrifying sarcoma. The wound healed well and the patient left the hospital. But, three months later, in October, she returned with considerable recurrence in the parts above the scar, extending so high towards the elbow as to render amputation through the arm necessary. The contrast between the infiltration and rapid and extensive recurrence in this case and the circumscribed character and more kindly course in the first case, is the more striking when it is noted that the tumour in this case was much the firmer and more highly organised. Of the diagnosis between parosteal and subperiosteal tumours, I can only say that it appears impossible until the tumour has been freely opened, but may then be easily made by feeling with the fingers whether the bone is closely covered with periosteum, or whether the latter is raised and the bone at any part rough and bare.

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[2] Sarcoma and Carcinoma, 1882. Introduction, &c.

[3] Feb. 20th, 1883.

MALARIOUS CHOLERA.

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PERNICIOUS malarious fevers have not received in this country the attention they deserve, and by most English authors they are either entirely overlooked or the possibility of their existence merely mentioned. In the official Nomenclature of Diseases, the "fièvre pernicieuse" of the French is made synonymous with febres pestiferæ singularum regionum, and the explanation given in the column of definitions shows that these fevers are not clearly understood. Pernicious fevers are there said to belong to the class of remittent fevers, but this is not the case, and the difference between a malignant remittent fever and pernicious fever is very considerable. Pernicious malarious fevers are essentially of the intermittent type, leaving during the intermission some stray symptoms of the pernicious attack, sufficient in most cases to greatly obscure the diagnosis. We know that the

ordinary intermittent fever may prove dangerous in many ways: to the young by convulsive attacks, to the old and weak by exhaustion, to some by rupture of the spleen, to others by the excessive elevation of temperature and consequent paralysis of the heart. In all such cases we have not to deal with a pernicious fever, but with an ordinary intermittent, in which the action of one of the stages is excessive or the individual is unable to resist the violence of the morbid action. The true pernicious fever personifies (if I be allowed to use that expression) some other disease—apoplexy, tetanus, meningitis, pneumonia, cholera, &c. The special symptoms show themselves either at the first or second paroxysm or, more rarely, at a later date, increasing in intensity and danger with each returning paroxysm; so much so that if the presence of the pernicious fever be not diagnosed at once, it is seldom that the patient recovers from the second attack; never, as far as I am aware, from the third. Pernicious fevers are more frequently seen in some localities than in others; but in large epidemics of malarious fevers, irrespective of locality, some cases are generally met with, and doubtless many deaths returned as due to pneumonia, meningitis, cholera, &c., would have been entered under the name of intermittent fever were this exceptional type of fever more generally known and its protean forms even suspected when dealing with sudden and violent sickness in a malarious locality. Malarious fever prevailed to a greater extent at the Yerrowda Central Gaol during 1875 than at any previous time since 1866, the date when the locality was first inhabited. From April, 1875, to March, 1876, the period during which I have been in charge of this gaol, no less than 1653 cases of intermittent fever, 93 of remittent fever, and 10 of pernicious fever, were admitted into the gaol hospital. The ten cases of pernicious fever consist of 1 apoplectic, 1 tetanic, 2 congestive, and 6 choleraic. The first four mentioned have been already well described by Continental authors, hence I will limit myself to those affecting the choleraic form, as such cases have not been, as far as I am aware, previously recorded, and also on account of their special interest to Indian medical officers, this form of malarious poisoning being so much like cholera.

I endeavoured to ascertain if any case of pernicious fever had occurred in previous years at Yerrowda, but the inquiry was surrounded by great difficulties; however, I found that in November, 1874, a fatal case of cholera had occurred. It is during November and December, the drying-up season, that malarious fever prevails here to a considerable extent, and it was during that season, in 1875, that most of the cases of pernicious fever were observed. On reading over the notes of that case of cholera (?) I was struck with its analogy to the cases of malarious cholera, and my assistant, Mr. Daniel Benjamin, a very able and experienced man, and who had attended the fatal case of cholera observed in November, 1874, states that it was entirely like the malarious cholera we were then observing. Evidently the able medical officer, at the time in medical charge of the gaol, had been puzzled by the appearance of this stray case of cholera, and unable to find a better explanation he attributed its occurrence to the patient "lying on the cold stone floor," a cause of cholera as yet scarcely accepted. Vomiting at the outset of an attack of intermittent fever is a phenomenon commonly seen; purging, although less frequently met with, is occasionally witnessed, and some degree of collapse is sometimes observed during the cold stage when this period is intense and prolonged; but these accidental symptoms are seldom combined, and they are pathologically as different from a case of pernicious malarious fever of the choleraic type as an ordinary attack of vomiting and purging is from true cholera itself. In this country, where cholera lurks everywhere and knows no season, it is of great importance that the existence of a disease, the outward manifestations of which are so similar, should not be ignored. Treatment in the two diseases is very different, and non-interference, which nowadays is almost the best course to adopt in true cholera, would be followed by very fatal results in malarious cholera; moreover, a more extended knowledge of this disease will doubtless explain many of the strange cases of cholera, whose appearance seems unaccountable, and apparently contradict the influence of human intercourse and the *rôle* played by choleraic discharges on the development and spread of Asiatic cholera.

CASE 1.—Sawlai Ramma, a Hindoo, under a seven years' sentence, of which half had been spent at Yerrowda, about thirty-five years of age, of a weakly constitution, was admitted into the gaol hospital on November 30th, 1875. The patient says that at 1 P.M. on the previous day he had an attack of intermittent fever, but it was not very severe, hence he did not apply to be admitted into the hospital. Since about noon to-day he feels very ill, and during the last half hour he has been purged four times. The motions are watery, contain some mucus, and are slightly tinged with blood. He vomited several times, first some food, and afterwards some watery matter; the skin is moderately warm; pulse weak, small, infrequent; tongue dry and coated; and he complains of slight abdominal pain. 5 P.M.: He has been purged five times and has vomited twice since last report; the discharges are watery and copious; the stools contain a little mucus. He complains of great thirst, of a burning sensation in the epigastrium, of severe cramps in the lower extremities and in the abdomen. The countenance is anxious and pinched, the voice husky, the skin cool; temperature in axilla 97·4°; the pulse filiform, 84; respiration hurried, 36; the extremities and the tip of the tongue are quite cold and the urine suppressed. 7 P.M.: He is apparently sinking; pulse hardly perceptible; tongue cold and clammy; features shrunken; great restlessness; but no vomiting or purging since the last report. 9 P.M.: Reaction setting in; pulse felt at the wrist; tongue somewhat moist and still cold at the tip; temperature in axilla 98°; urine suppressed. 10 P.M.: Good reaction; pulse weak, no cramps; no purging or vomiting; temperature 98·4°. He spent a good night, and towards morning passed a few ounces of high-coloured urine, free from albumen. There was no return of the paroxysm. The following mixture during the attack was prescribed: half a drachm of chlorodyne in an ounce of camphor water, repeated every second hour; also frictions, hot-water bottles to extremities, sinapisms, turpentine stupes, spoonfuls of arrowroot and brandy. Twenty grains of the hydrate of chloral were given when the reaction had fairly set in. An hypodermic injection of five grains of sulphate of quinine was made early the following morning, and repeated at 9 A.M. Quinine was continued for several days, some also being administered by the mouth.

CASE 2.—Ajoo Kesra, under sentence for life in the Yerrowda gaol two years ago, aged about forty-five, general health good; was frequently in hospital on account of intermittent fever. On August 8th, 1875, he was admitted into hospital. 4 P.M.: The paroxysm of fever began at 10 A.M., with rigor; the last stage set in early, from which he was still suffering when, at 4 P.M., he was suddenly seized with vomiting and purging; the dejecta were abundant and watery, at first tinged with bile, afterwards slightly with blood; tongue dry; complains of thirst and headache. Temperature in axilla 101°; pulse frequent.—9th, 8 A.M.: Vomiting and purging very frequent during the night; the discharges are watery, occasionally tinged with bile or blood; pulse small, weak; features shrunken; skin shrivelled; urine suppressed; temperature in axilla 98°. 5 P.M.: Passed a pretty good day; towards 4 P.M. vomiting and purging returned; pulse very weak; extremities cold; no cramps; passed some urine towards noon. Temperature in axilla 100°; pulse frequent, 112.—10th, 8 A.M.: Purged six times and vomited twice during the night; evacuations quite watery, not tinged with bile or blood. Since the morning he seems much improved. Pulse 80, regular; temperature in axilla 98°; passed some high-coloured urine this morning. The patient quickly improved from this date; there was no return of the choleraic symptoms or of fever, the reaction was quiet, and he seemed to pass at once from severe illness to convalescence. On Aug. 18th he was discharged well. The treatment was the same as in Case 1. The second day, beyond the hypodermic injection of quinine, ten grains of the salt were given by the mouth. The quinine was continued for several days after perfect recovery.

CASE 3.—Goabye, a Chinaman, under a fifteen years' sentence in Yerrowda since ten years, a tall man of a weakly constitution, was admitted into hospital for intermittent fever on November 20th, 1875; he had suffered from two attacks previous to admission. The paroxysm sets in daily at 10 A.M. with rigor, and subsides at 4 P.M. with slight perspiration.—22nd, noon: He is suddenly seized with vomiting and purging; within an hour he passed three copious watery motions tinged with bile; he vomited four times during the same interval, the vomited matter being watery and abundant, at first tinged with bile, afterwards quite clear. He complains of a painful feeling of sinking at

the epigastrium and of severe cramps in the lower extremities; eyes sunken; countenance anxious; features shrunken; great thirst; skin cool and moist. Temperature 98·1°; pulse weak 98; respiration somewhat hurried, 30. 2 P.M.: Has passed two watery motions in bed; no vomiting; skin cold and clammy; tongue cold at the tip; pulse hardly perceptible; cramps in the legs very severe; eyes deep set; features shrunken; skin shrivelled; urine suppressed; voice husky. Temperature in axilla 97·2°; breathing hurried, 40. 4 P.M.: Slight reaction is setting in; skin moderately warm; countenance anxious; pulse felt at the wrist but weak and slow; tongue dry; no purging; cramps less severe; complains of great thirst; urine suppressed. 5 P.M.: Improving; passed some dark-coloured urine. Temperature 98·2°. 8 P.M.: Beyond considerable weakness feels well. Temperature in axilla 98·4°; pulse 82, soft and small; thirst less urgent. There was no return of fever or of choleraic symptoms. The convalescence was rather slow. He was discharged on the 28th. Same treatment as in Case 1.

CASE 4.—Toolsee Sewa, undergoing a sentence of seven years at Yerrowda since two years, of a good constitution, age about thirty, was admitted into the gaol hospital on December 8th, 1875, suffering from quotidian intermittent fever. He had an attack on that day, beginning at 9 A.M. with rigor, and subsiding at 3 P.M. with free perspiration. He had suffered previously from several attacks of intermittent fever, and had been treated for that disease in September and November of the same year.—9th, 4 P.M.: The paroxysm began as usual at 9 A.M. with rigor; at noon he felt very sick, and vomited some watery matter; since then he vomited freely four times and passed copious watery stools, sometimes tinged with bile, others of a slightly reddish tinge. The pulse is small, weak, frequent; countenance anxious; eyes rather shrunken; tongue cold at the tip; urgent thirst; complains of severe cramps in the legs, of a burning heat in the epigastrium; voice husky; temperature in the axilla 99·2°; urine suppressed; breathing hurried, 32. 7 P.M.: Vomited only once since last report. Pulse improved; extremities not so cold; no cramps; urine still suppressed; temperature in axilla 98°.—10th: Passed a good night; no return of vomiting or purging; skin moist; temperature in axilla 98·2°; pulse well felt, 76, small and compressible; has not passed any urine. 2 P.M.: Doing well; pulse 84; temperature 98·6°; respiration 20; passed a small quantity of urine of a deep amber colour, specific gravity 1024, slightly acid, no albumen. He continued to improve, and was fairly convalescent when, on the 17th, he had a return of intermittent fever, beginning with rigor at noon and subsiding at 4 P.M. with profuse perspiration. Large doses of quinine were again administered, and since then he had no return of fever. He was discharged well on January 29th, 1876. The same treatment as in Case 1.

(To be concluded.)

ON FIFTY CASES OF TURNING.[1]

BY F. H. V. GROSHOLZ, M.K.Q.C.P.I., &c.

IT is not my intention to give a detailed account of each individual case of the fifty in which I have thought it necessary to perform the operation of version, as, though such minuteness might prove not altogether uninteresting nor entirely unprofitable, yet doubtless a summary of the facts and the deductions to be drawn therefrom will more graphically, and at less expense of time, effect the object I have in view—viz., the consideration of the causes which demand an artificial termination of labour by the aid of turning, the results of that operation as regards both mother and child, the method and time of performing the operation, and the lessons which are taught by its results, whether successful or otherwise.

First, then, as to the causes which necessitated version. As turning is generally understood to mean a restoration of a child to its normal position in the uterus, or the substitution of some other portion of the body for that originally presenting, it will not seem surprising that the operation was performed for the rectification of some malposition of the fœtus in thirty-eight out of the fifty cases. Of the remaining twelve, five were cases of placenta prævia, four of contraction of the pelvis, and three of uterine inertia. We thus see that thirty-eight, or about four-fifths, of the cases in which the operation was performed were cases of *malpresentation* of the fœtus, four of *malformation* of the mother, five of *malposition* of the placenta, and three of failure of the uterine contractions. To go a little more into detail, I have tabulated the above facts as follows:—

Malpresentation	Shoulder	18	38
	Arm and funis	8	
	Arm	6	
	Face and hand	3	
	Brow	1	
	Brow and hand	1	
	Back	1	
Pelvic contraction			4
Placenta prævia			5
Uterine inertia			3
			50

Secondly, as to the results of the operation as regards both mother and child. The average maternal mortality has been estimated by Dr. Churchill as 1 in 15, and the infantile as 1 in 2½. In my fifty cases I have had no deaths among the mothers; twenty children were either born dead or died soon after birth. This seems a rather high infantile mortality; it is indeed exactly in the proportion above-named; but as eight of the children had manifestly been dead for some time (as evinced by signs of putrefaction more or less advanced), it is hardly fair to class their death among those *due* to turning. Omitting these, the proportion of dead children delivered by version is reduced to 1 in 3½, which I consider a very fair average. Of the other twelve children which were born dead, two were cases in which the funis was prolapsed; two in which there was placenta prævia; and the remaining eight may be roughly classed together as owing their death either to a disproportion between the maternal pelvis and the infantile cranium, or to a too prolonged compression of the umbilical cord. One woman was only twenty years of age, and another as old as forty-five. One child weighed 13 lb. 2 oz; and one, which lived nearly two days, weighed only 2 lb. 1 oz.

Having enumerated the causes which demanded version, I will next briefly remark on the signs by which I have been guided in the selection of the time which seemed most favourable for performing the operation. In every labour all obstetricians will concede that it is of the utmost importance to become acquainted with the exact position of the child at the earliest possible opportunity. Where there is a malpresentation, its early discovery is of the greatest importance, for before the membranes are ruptured not only can turning be performed more easily, and with less risk to the mother, but the chances of the child's life are also much increased. After the membranes are ruptured, the danger to both mother and child becomes greater and greater as time goes on. Indeed, no cases require such gentleness, patience, and persevering courage on the part of the operator as those cases of malpresentation in which the membranes have long been ruptured, and the uterus is closely contracted around the fœtus, pressing it more and more firmly down into the pelvis. In cases where the os has not been sufficiently dilated to admit the passage of the hand, and where a speedy termination of labour was essential, I have found very satisfactory results from the practice of gently and gradually dilating the os by passing the tips of the thumb and two fingers within it, and have by their aid, without the use of anything like undue force, frequently been able to effect a comparatively speedy dilatation. In two cases I used Barnes's dilators, and they most fully answered my expectations. I need hardly say that Braxton Hicks's method of version by combined internal and external manipulation not only greatly facilitates the operation, but also enables us to perform it sooner than would be justifiable were it necessary to introduce the whole hand within the uterus. Indeed, if called to a case of arm-presentation, in which the membranes are unruptured, and the os, though small, is soft and dilatable, I see no reason to defer the operation, for, in awaiting the fuller dilatation of the os, you run the risk of a sudden rupture of the membranes, thereby losing the chance of an easy, safe, and successful termination of the case.

Having now cursorily considered the period at which it is best to perform version, I will proceed briefly to describe

[1] A paper read before the North Wales Branch of the British Medical Association, July 3rd, 1883.

the manner in which I usually perform the operation. The ordinary obstetric position (the patient lying on her left side) is, I think, preferable to any other, though in a few very difficult cases where the abdomen of the child was placed anteriorly, and where the liquor amnii had long escaped, I have found it advantageous for the mother to lie on her back, and have thus been more easily able to pass the hand over the child's body. In nearly every instance I use the left hand, as I think it much more readily adapts itself to the curve of the sacrum, leaving at the same time the right hand at liberty to manipulate externally; then, too, the left hand is generally smaller than the right, a not unimportant point to be considered in the choice of the operating hand.

It is not necessary for me to describe the operation of version, whether it be the simpler and safer plan of turning by combined internal and external manipulation, or the more serious operation when it is necessary to introduce the hand into the uterus from which the waters have escaped, and which is firmly contracted around the child. On one or two points, however, I should like to say a few words, giving the conclusions I have arrived at from a not inconsiderable experience in this operation. As long as the operator's hand can take hold of one of the inferior extremities, it is immaterial whether a foot or a knee be seized. In transverse presentations, traction on the knee or foot of the side opposite to the presenting shoulder effects rotation more readily than by bringing down the leg of the same side. It is decidedly advantageous to bring down only *one* foot or knee instead of both, as in this manner the parts are better dilated, and less difficulty is experienced in the delivery of the rest of the body. Where, after bringing one foot down, the body does not readily turn, it is a good plan to pass a tape round the limb, and whilst making traction on it downwards and backwards, to attempt to push back the presenting shoulder. In placenta prævia I prefer to turn by Dr. Hicks's method as soon as the condition is recognised; where it is necessary to pass the hand into the uterus, I try to do so at the point where the placenta seems least attached, and never through its substance.

Knowing the extreme value of chloroform in causing relaxation of the spasmodically contracted uterine fibres, it may seem strange that I have only used it in three cases. Unfortunately, my patients and their friends have all shown such a determined opposition to the administration of chloroform that I have on nearly every occasion been compelled reluctantly to proceed without the aid of anæsthesia. That this has greatly added to the risk of laceration of the uterus there can be no doubt, nor that it has also added enormously to the anxiety, difficulty, and pain experienced by the operator; and, under the circumstances, I think it remarkably lucky that though there have been several cases of tedious convalescence, yet all my fifty patients have eventually completely recovered. In the three cases in which chloroform was administered it was of the greatest possible service, and I now more strongly than ever advise its use both in version and every other obstetric operation.

With regard to the relative merits of version, long forceps, and craniotomy, there is no doubt that each method has peculiar advantages in certain circumstances, and that every accoucheur should be intimately acquainted with each obstetric operation; yet at the same time none requires and deserves more careful study and practical skill than the ancient, most important, and truly conservative operation of turning.

Aberdovey.

CEPHALOTRIPSY.

BY C. EGERTON JENNINGS, L.R.C.P. LOND.,
FORMERLY RESIDENT ACCOUCHEUR AND HOUSE-PHYSICIAN AT THE LONDON HOSPITAL.

WHY is it that out of the large number of obstetricians who perform craniotomy, and who are possessed of perforators, crotchets, hooks, and even craniotomy forceps, comparatively few practitioners ever use a cephalotribe? Is not this a common case? A medical man, on being summoned to a woman in labour, finds the fœtal head above the brim of a pelvis, contracted apparently in a minor degree. The forceps are applied, but the head maintains its position. A second opinion is called in, chloroform administered, and a further but unsuccessful attempt is made to deliver with the forceps. Perhaps version is now tried or craniotomy performed; the cranium is decerebrated, and traction made by means of craniotomy forceps and crotchet. The case seeming to be desperate, further advice is obtained; a third doctor, who possibly lives some distance off, arrives after much delay; the Cæsarian operation is discussed; a final trial is, however, made to deliver *per vias naturales*, which is at last successful, the entire procedure having occupied many hours. Has not this patient been exposed to the perils of uterine inertia and post-partum hæmorrhage, and by the contusion and laceration of the soft parts, which have probably occurred, has she not been rendered obnoxious to pyæmia?

I contend that delivery would have been much expedited, and the patient's safety far better consulted, had a cephalotribe been at hand. It is, perhaps, impossible to devise an instrument which, besides being efficient as a crusher, is also a good tractor, capable of ready application, and not liable to slip off when once carefully applied to the head—an instrument that will occupy little room in the contracted pelvis, that is sufficiently light not to weary the operator's hands, being at the same time well-balanced enough for him to manipulate the screw with ease, and withal fairly portable. The annexed engraving illustrates an instrument I have designed, and which, so far as my observations with it enable me to state, fulfils most of these conditions. Its extreme length is 16½ in., the length from lock to tip 11 in., the greatest width between the closed blades 1½ in. (if very tightly screwed down another ½ in. can be gained in this diameter). Each blade measures 1½ in. across at its widest part, and is fenestrated, the fenestra being ¼ in. wide and 5 in. long. A glance at the drawing will show that the fenestrated portion of the blade is deeply grooved longitudinally and dentated transversely on its inner surface, the tip meeting its fellow at an angle of 30°. There being no abrupt incurvation at this extremity, the instrument can be applied to the fœtal head with much facility. The pelvic curve is slight,[1] and occupies the fenestrated part only. When laid on the table the tips of the blades are elevated 2½ in. above the level surface, whence the amount of pelvic curvature can be inferred. The handles have projecting shoulders, after the pattern of Palfrey's craniotomy forceps. The compressing screw works on a pivot in such a manner that when not in use it can be folded within the handle, fluted for its reception.[2] It is impossible to attach too much importance to the practical value of a screw adapted in this manner. It is most embarrassing to an operator (especially if unassisted), should he wish to readjust the cephalotribe, to be compelled to detach and afterwards reapply the "third piece" in the shape of a screw, which belongs to most of the cephalotribes now in use, and which, when slippery, do most readily drop from the accoucheur's hand to the floor, to his no small annoyance.

Though entertaining myself a due regard for fœtal life, I have no hesitation in expressing my conviction that craniotomy and cephalotripsy are operations far too frequently avoided. The physician who condemns sacrificial midwifery only too often applies forceps or performs podalic version as a forlorn hope: he may indeed after protracted efforts extract the offspring (frequently diseased, malformed, or mortally harmed by delivery), inflicting irremediable injury on the mother. I am convinced it would be good were he to remember the Latin motto, which applies so well to obstetrics, as to the other departments of medicine and surgery: *Destruendo conservabis.*

[1] For a clear exposition as to the length of blade and degree of pelvic curvature a cephalotribe should possess, the reader is referred to Barnes's "Obstetric Operations."

[2] I am indebted to Messrs. Maw, Son, and Thompson for the care they have bestowed on the construction of this cephalotribe.

A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

ST. THOMAS'S HOSPITAL.

UNUNITED FRACTURE OF PATELLA; OPERATION; CURE.

(Under the care of Mr. SYDNEY JONES.)

FOR the notes of this case we are indebted to Mr. W. H. Battle, surgical registrar.

J. P——, aged twenty-eight, a labourer, was admitted on Sept. 7th, 1882, and left the hospital, cured, on Feb. 2nd, 1883 (149 days). Seven months previous to admission he fell down and fractured his left patella. The knee was put up with strapping and kept on a hard splint for eight weeks, during six of which he remained in bed. He resumed work as a labourer about the ninth week. The knee was fairly strong until four months before admission, when a piece of iron fell across the same knee. This, it would appear, produced acute inflammation of the joint, and from that time he was unable to walk. His general health was good.

On admission it was found that the left patella had been fractured transversely, the fragments being separated by an interval of two inches; there appeared to be very little fibrous tissue between them, and they could be approximated fairly easily. The fracture had crossed the bone about the middle, and the outline of the condyles could be plainly distinguished. There was no fluid in the joint. The leg was fairly muscular, but not large; the patient could not, however, walk more than a few steps. His general health was good. The urine contained no albumen.

Oct. 11th.—The exact distance between the margins of the fragments was two inches and a half. Mr. Sydney Jones decided to bring the fragments into apposition by operation. This he did in the following manner:—Ether having been administered, an incision about six inches in length was made along the front of the joint, in the middle line, and in the long axis of the limb; the skin was reflected to each side and the fragments exposed. These were found connected by means of thick fibrous tissue. This was separated from the fragments, and a thin transverse section taken from each fragment. The synovial membrane of the joint was thickened, but the joint itself was otherwise healthy. An attempt was now made to approximate the fragments, but they could not be brought into close contact. The expansion of the fascia of the thigh to the quadriceps extensor muscle and sides of the upper fragment was then divided on each side to the extent of about an inch upwards; but this did not prove sufficient; accordingly the rectus muscle was subcutaneously divided about three inches above the patella. The fragments did not come well together until the posterior edge of each had been removed. Two holes were drilled in each fragment from the anterior surface to the middle of the cut surface of the fragment, and two sutures of thick copper wire covered with silver were inserted, and the two portions of the patella completely brought together. Three turns were taken in each suture from within outwards; lateral incisions were made, and drainage-tubes placed in each. The wound was closed with silk sutures and antiseptic dressing applied. The spray was used throughout the operation. The limb was placed on a straight excision splint, strips of flannel soaked in plaster-of-Paris being applied along the front and the whole carefully bandaged. Three hours after the operation there was found to be slight hæmorrhage; the wound was redressed, and the limb elevated. Evening temperature 99·6°. Patient was very restless during the night, and had two hypodermic injections of morphia. Next morning he was in a good deal of pain, and had vomited several times. Morning temperature 100·2°, evening 102·4°. — 13th: Another restless night. The wound was dressed in the afternoon, and a collection of blood-stained fluid was found above the upper border of the patella. The top stitch was removed and a fresh tube placed across the joint under the patella, being brought out through the lateral openings; the smaller pieces were not replaced. Morning temperature 101·2°, evening 102·2°. — 20th: The wound was redressed on the 15th and again to-day, when all the remaining sutures were removed. The wound was firmly united, excepting in the upper part, where there was a small collection of pus; the puncture made for tenotomy had to be opened up for a similar reason. The morning temperature on the 15th was 102°; 17th, 100·4°; 19th, 98·4°; 20th, 99·4° Evening temperature: 15th, 102·2°; 17th, 101·8°; 19th, 100·2°; 20th, 100·8°.—24th: As the wound when dressed appeared to be irritated by the carbolic acid dressings, eucalyptus was substituted. The collection above the upper fragment is quite gone. The temperature has been lower until this evening, when it is 102·4°.—27th: Wound redressed.—31st: Wound redressed. There was some puffiness to inner side of the patella.

Nov. 11th.—Wound redressed on the 4th, the 8th, and again to-day; the upper part is now healed. Short drainage-tubes placed on each side. General health good. Since the 24th the temperature in the morning has risen from 98° to 100·2°; in the evening 99·8° to 101·8°.—24th: Wound redressed; the leg was removed from the excision splint and placed on a MacIntyre; the wire sutures were removed; there was close union between the fragments of the patella. Forty-four days after operation the drainage-tube on the outer side of joint was removed.—29th: Wound redressed, and all the drainage-tubes removed; there was a good deal of discharge in the dressings. Before the 26th the evening temperature was nearly always between one and two degrees higher than in the morning; since then (with one exception, 25th, 100°) it has not exceeded 99°.

Dec. 22.—Antiseptics discontinued. There are still two discharging sinuses on the inner side of the patella. The leg was put up in a posterior plaster splint, the foot being left free. The temperature has been normal since the 3rd (13th, P.M., 100°). The patient's general condition is good.

Jan. 4th.—Slight rise of temperature, due to the formation of an abscess on inner side of the patella; this was opened on the 5th, and a considerable quantity of pus evacuated. The other sinuses had quite healed.

When the patient was first allowed to get up there was œdema of the leg and feet, but as he got stronger this disappeared, and he was able to do without a bandage, which he at first used. When he left the hospital he was able to walk a short distance without the aid of a stick, and the joint was capable of considerable flexion. The union between the fragments was quite firm, and the patient was much pleased with the increased usefulness of the leg, and as he was inclined to persevere in his efforts to get increased flexion of the joint, there was every prospect of his having an almost perfect limb.

ROYAL UNITED HOSPITAL, BATH.

FIVE CASES OF TYPHOID FEVER TREATED BY COLD BATHS, FOLLOWED BY SALICYLATE OF SODA; REMARKS.

(Under the care of Dr. H. F. A. GOODRIDGE.)

FOR the following notes and remarks we are indebted to Mr. M. W. H. Russell, resident medical officer.

CASE 1.—Henry D——, aged ten years, was admitted into George ward on January 26th, 1883. He felt quite well until four days before admission, when his appetite failed and he had headache and general lassitude. The following day the bowels became loose and he developed a cough. He rapidly got worse, cough and diarrhœa persisting.

On admission the temperature was 103° F., the pulse 124, small and feeble, and respiration 32. Patient fairly nourished. Has flushed face, cough, weakness, complete loss of appetite, and diarrhœa. Stools very loose and pale. Is very drowsy and stupid. Tongue, clean tip and edges, dorsum furred. Heart irregular, sounds feeble; no bruit. All over lungs abundant sonoro-sibilant rhonchus. No expectoration. Abdomen: convex, tympanitic; abundant gurgling with tenderness in right iliac fossa. Three rose papules on the belly and one on the back. Splenic area of dulness increased, lower edge of organ not felt. Evening temperature 102·6°. Urine, sp. gr. 1020, acid, free from albumen.

January 27th.—Cough has been very troublesome. The patient has been in a torpid condition during the night, and has voided urine into the bed. There are no fresh spots.

Wandered towards morning; 4 P.M., temperature 104·2°; patient placed in bath and kept in for fifteen minutes; temperature of water 68° F. The effect of the bath on the pulse was marked. During the first five minutes the beats were so small as to be almost imperceptible, but during the latter ten minutes of the bath they were noticed to gain considerably in tone and volume, so that on removal from the water the pulse was decidedly stronger than before the patient was put into it. An hour afterwards the temperature was 101° F.—28th: Patient had two baths yesterday and has had two more to-day. He has to a great extent shaken off his stupor and has had no more wandering since the second bath.—31st: Several more spots have appeared. Bowels open twice daily; stools light and loose. Has daily two or three baths. The average fall of the temperature after each bath is 2° F.

Feb. 3rd.—Still requires bathing. Tympanites diminishing; cough improving; less apathy; tongue moist; pulse 96, small.—9th: Stool partly formed to-day. Bears baths very well. Cough almost ceased. Rhonchus disappearing.—12th: To-day, the twenty-first day of illness, the temperature for the first time dropped to normal. Evening temperature 101·4°.—13th: Temperature remains between 98° and 100°; ordered ten grains of salicylate of soda thrice daily. The temperature never rose again after this, and the lad made a slow but uninterrupted recovery. The salicylate was continued until March 2nd, when it was given up. He had altogether twenty-eight baths.

CASE 2.—Charles S——, aged thirteen, admitted into George ward on Jan. 26th, 1883, was quite well until six days ago, when he got headache and lost his appetite. Next day he felt too ill to work. On the third day of the illness diarrhœa came on, and has continued since.

On admission the temperature was 102·6°; pulse 116, soft. A well-grown, muscular boy, with headache, lassitude, loss of appetite, cough, pain in the belly, and diarrhœa. The tongue was coated with dirty brown fur, the tip and edges being red and dry. Over the chest scanty snoring rhonchus, with fine crackling over the bases. Blowing systolic pulmonary murmur and sharp second sound. Abdomen slightly distended; tenderness and gurgling in right iliac fossa; skin dry and hot; tache marked; spleen not felt. Half a dozen typhoid spots over the abdomen and back.

Jan. 28th.—Spots still appearing; splenic dulness enlarged; has required bathing three times.—30th: Slight nose-bleeding this morning. Spots coming out in profusion. The temperature has not risen above 102° since the 28th.—31st: To-day (the eleventh day of the disease) the temperature dropped at 8 A.M. to 99° F. Bowels open once this afternoon; stool loose and clay-coloured; contained a round worm. Ordered three grains of santonin.

Feb. 2nd.—The temperature at 8 A.M. was 98·4° F. Bowels open; no more worms. Ordered ten grains of salicylate of soda three times a day. The temperature never again rose above 100° F., and the patient convalesced rapidly. Continued taking salicylate until Feb. 24th.

CASE 3.—Thomas F——, aged twelve, admitted Jan. 26th, 1883, into George ward. Was quite well on the 23rd, and took his meals heartily. Next morning felt ill, vomited, and lost appetite. Yesterday the bowels were very loose, and patient developed a slight cough.

On admission the temperature was 102·6°, pulse 124, respiration 24. Complains of cough, thirst, headache, loss of appetite, and diarrhœa. Sonoro-sibilant rhonchi all over the lungs. Distension of abdomen, no gurgling; tache marked; no spots; area of splenic dulness not enlarged.

Jan. 28th.—Two spots found this morning on the abdomen. Tongue dry and furred; tenderness and gurgling all over the abdomen; bowels open freely; loose clay-coloured stools. Spots continued coming out until Feb. 6th. Patient had altogether eighteen baths. On Feb. 12th, the twentieth day of illness, the temperature fell to 97° F., and he was ordered ten grains of salicylate of soda thrice daily, for three weeks. He recovered well and quickly.

CASE 4.—George M——, aged fourteen, admitted into George ward on Feb. 6th, 1883. Came in on the sixth day of illness. Temperature 102·4°, pulse 104, respiration 36. Distension of abdomen, with tenderness and gurgling; spleen felt projecting an inch and a half below the ribs. No spots all over chest; sonoro-sibilant rhonchi.

Feb. 7th.—About a dozen rose-coloured spots have appeared. Had four baths to-day; after each bath the temperature falls to about 101° F., where it remains for about two hours, after which it rapidly rises again to 104°.—8th: Fever still high; five baths to-day. Abundant whistling râles over the chest. Pulse 116. Ordered two ounces of brandy daily.—10th: Five baths yesterday and four to-day. A little faint and blue after the last three baths; given a teaspoonful of brandy after each; typhoid stools.—12th: Gums are bleeding and are decidedly spongy.—14th: Gums still oozing.—23rd: Has had altogether thirty-four baths. To-day the temperature has dropped for the first time to normal. Ordered ten grains of salicylate three times daily for fourteen days. Made a good recovery.

CASE 5.—James P——, aged twelve, was admitted into George ward on February 6th, 1883. He came in on the third day of illness. A weakly, strumous-looking boy. Tongue coated with a creamy white fur, clean tip and edges; face flushed. Abdomen slightly distended; tache marked. Slight tenderness and some gurgling in the right iliac fossa. One rose spot in the right flank. The lower edge of the spleen can just be felt below the ribs. Breath sounds clear. Temperature 101·8°; pulse 112.

February 7th.—Quite a crop of spots have appeared during the night. Bathed three times.—10th: Spots continue to appear. The one noticed on admission is fading. The patient has had ten baths so far.—12th: Tongue clammy; lips and teeth covered with sordes. Given a weak solution of permanganate of potash to rinse his mouth. Bowels open about once a day, loose stools. Two baths yesterday and one to-day.—15th: One bath yesterday.—18th: A tender reddened swelling over the right angle of the jaw.—22nd: Since the 18th the temperature has kept steadily between 101° and 102° F. The gums are to-day spongy and bleeding. The temperature has dropped to 97·2°.—23rd: The bleeding from the gums continues, and in addition this morning the patient is losing blood from the nose and left ear. The urine passed is as dark as porter and contains a large percentage of blood; bowels not open. Ordered a mixture containing ten grains of tannic acid and twenty minims of liquid extract of ergot, to be taken every four hours, with ice to suck. The temperature has risen again to 101°. 8 P.M.: Bleeding continues from gums and a little from nose, it appears to be a general oozing. The gums are spongy and fungating. Bowels open once this afternoon; stool contained about half a pint of blood. There are no purpuric spots or patches about the body.—24th, 8 A.M.: Temperature 102°; sponged; the urine still contains a large amount of blood; oozing from gums abating; bowels open twice during the night, each time stools contained blood. Ordered two grains of acetate of lead, ten minims of dilute acetic acid, water to half an ounce, every four hours. Two lemons daily.—25th: Still oozing from gums; bowels open three times, stools largely made up of blood; urine like porter. The temperature was maintained at 101°.—26th: Gums almost ceased bleeding; bowels open three times, blood diminishing; urine still highly charged with blood. The temperature was 99·6° at 8 A.M.; pulse very small and weak, hardly perceptible. Patient blanched.—27th: Bowels open twice, small quantity of blood each time; very slight oozing still from mouth; less blood in urine. The temperature 98·6°.—28th: All bleeding ceased; patient takes nourishment and stimulant well. Repeat mixture three times a day. The temperature remains normal.

March 3rd.—Has rallied well during the past three days; fed every fifteen minutes. Omit mixture.—6th: No further loss of blood. The lump over angle of jaw noticed before has remained in abeyance until to-day; it is now painful and fluctuates distinctly; bowels open once, stool loose, no blood.—7th: Abscess over jaw lanced and about two drachms of pus evacuated. Ordered five grains of citrate of iron and quinine three times a day. Patient has progressed uninterruptedly since, and is now quite convalescent.

Remarks.—The foregoing cases present several features of interest, both clinical and therapeutical. The patients were all boys under fifteen years of age, were attacked much about the same time, and were all inmates of a neighbouring industrial school, where, being under constant supervision, the onset of the disease was ascertained with tolerable accuracy. Cases 3 and 5 were admitted on the third day, Case 1 on the fifth, Case 4 on the sixth, and Case 2 on the seventh. The spots were plentiful, and appeared in each case on or before the seventh day. In Case 3 they appeared on the fifth day, in Case 1 were present before the fifth day, and in Case 5 there was an indubitable typhoid spot visible on admission, the third day of illness. This latter is an exceptionally early appearance even for a child.

In three of the cases there was bronchial catarrh of considerable severity. Case 2 was a mild one; its chief point of interest was the presence of the round worm, a by no means unreal element of danger, as evidenced by a former case of Dr. Goodridge's, where perforation appeared to be directly due to the presence of such a parasite. The most important clinical point was undoubtedly the occurrence of scorbutic symptoms in two of the cases. Mild in Case 4, they were in Case 5 sufficiently severe to seriously threaten his life. This is a complication which, so far as I can discover, is of considerable rarity in the annals of typhoids. In both cases it appeared at a fairly advanced period of the fever disease —in Case 4 on the twelfth day after the fever, which had been very severe, had spent its force, and in Case 5 as late as the nineteenth day of the disease. In this latter case, the hæmorrhage being severe, its onset like an ordinary typhoid hæmorrhage, was signalised by a sudden drop in the temperature. This, however, quickly rose again, whilst the hæmorrhage was still going on, and transcended its former height. Suspicion was directed to the dietary of the school; but this on investigation was found to contain an abundance of antiscorbutic elements. To advert to some points in the treatment. The diet in all these cases was restricted to iced milk. They were treated strictly antipyretically, and the only antipyretic used was cold water; no drugs. The temperatures were taken every four hours; and whenever 103° F. or higher was registered, the cold bath was called into requisition. Sponging with ice-cold water for ten minutes was employed whenever the temperature stood between 102° and 103°. An hour after each bath the thermometer was used, with an average result of showing a drop of two or three degrees in temperature. The efficacy of the baths in keeping the temperature down is amply shown by the charts, more especially in those cases which had the advantage of early treatment. In Case 4, where the pyrexia had obtained a good start, their effect was less well shown at first, though after having once broken the neck of the fever (in this case on the fourth day of treatment), they succeeded in making it fairly tractable. Some of the other good effects noticed after the baths were (1) the almost invariable bracing-up of the pulse after the first rude shock was over; and (2) the banishment of delirium. The baths were well borne in Cases 1, 3, and 4, not appearing to exercise any baneful influence on the severe bronchial symptoms. As soon as the temperature had once spontaneously dropped to normal, the patients (with the exception of Case 5, who was deemed too prostrate) were placed upon salicylate of soda, after the plan of Prof. Immermann, as advocated by Dr. Cayley, in his Croonian Lectures on Typhoid, and practised by him in his wards. This was done with the original view of guarding against relapse, to which accident, it is shown, the cold bath treatment rather predisposes. In two cases it slowed the pulse to 60; but no other depressant or toxic symptoms of the drug were noticed. The patients took it well, and throve whilst taking it. The exhibition of this drug during early typhoid convalescence appears to be a valuable addition to the bathing treatment, influencing in a distinctly favourable manner the number of relapses. One valuable property the salicylate possesses is to check the ravenous cravings for food in early typhoid convalescence, and thus diminish the risk of indiscretion in diet. A point worthy of note in Case 5 was the happy way in which the acetate of lead checked the hæmorrhage after the ineffectual administration of other drugs.

Reviews and Notices of Books.

Localisation of Cerebral and Spinal Diseases. By J. M. CHARCOT, Physician to La Salpétrière. Translated and Edited by W B. HADDEN, M.D. London: The New Sydenham Society. 1883.

THERE can be no doubt that the New Sydenham Society has acted wisely in selecting for publication the translation of another work by the renowned Charcot. The present volume does credit to all concerned. We congratulate Dr. Hadden upon the successful accomplishment of his task. He has presented the English-reading portion of the medical public with a readable interpretation of the lectures of the able French physician. In a preface to the lectures Dr. Hadden has brought together some portions of neuro-physiology not contained in the body of the work. We may notice in this regard a summary of the experiments performed on monkeys by Ferrier and Gerald Yeo on the visual centres in the hemispheres, with an abstract of Ferrier's inferences on cerebral amblyopia and hemiopia; an account of a new tract of spinal degeneration in the anterior part of the lateral column observed by Gowers, and in another instance by Dr. Hadden; a condensed and clear statement of the recent researches into the nature of the so-called tendon reflexes by Gowers, Tschirjew, Waller, and Horrocks. This information is valuable, and, as it is contained in a prelude by itself, unobjectionable. It is questionable, however, whether many readers would not have preferred to study Charcot without any admixture from without, and for these individuals the introduction of the views of other observers not quoted by Charcot on some debated point in neurology may appear impertinent. The translator mentions that the French edition was edited and partly annotated by MM. Bourneville and Brissaud.

We cannot praise these clinical and anatomical lectures too highly. As Charcot himself says, they constitute an introduction only to the clinical history of cerebral and spinal disease as met with in man. But such an introduction!

The first part of the work treats of the localisation of cerebral disease, and sets to work in a thorough fashion by describing the broad anatomy and histology of the cerebrum. Perhaps the principal fact in the minute anatomy is the general distinction of the cerebral cortex into anterior and posterior, the former containing the large motor cells which are absent in the latter. Charcot insists on the necessity for good clinical observations and careful autopsies of cases of disease of the central nervous system. Having drawn attention to the frequency of vascular lesions in cerebral pathology, an elaborate description of what is known concerning the arterial circulation of the cerebrum follows, and forms the main subject of the next five lectures. Cerebral and hysterical hemianæsthesia are contrasted in the next lecture. Charcot has long held decided views on crossed amblyopia and lateral hemiopia. He says that lesions of the cerebral hemispheres causing hemianæsthesia give rise also to crossed amblyopia, and not to lateral hemiopia. The well-known diagram explanatory of the phenomena of lateral hemiopia and crossed amblyopia naturally finds its fittest place here. The origin of the cerebral parts of the optic nerves is dealt with next. On arriving at the twelfth lecture it is obvious that we have to do with questions of exceeding importance. The division of the central masses of the hemisphere into anterior or lenticulo-striate, and posterior or lenticulo-optic regions, is apparently of surpassing interest from an anatomical and pathological standpoint. Damage of destructive sort to the anterior region which comprises the anterior two-thirds of the internal capsule, caudate and lenticular nuclei, produces loss of motion on one side of the body without any associated hemianæsthesia, but the loss of power is less when the grey matter of this region is destroyed as compared with the pronounced and lasting palsy which accompanies the lesion of the white matter (internal capsule).

In the second part of the book, which concerns chiefly the localisation of spinal disease, the predominant feature is the anatomy and physiology of the pyramidal tracts. The reader is taken through a course of most instructive lectures, and cannot fail to possess himself of the main embryological, anatomical, physiological, and pathological facts already known on the subject of the pyramidal tracts. For this knowledge we are indebted mainly to Flechsig. It is shown that during the first few weeks of extra-uterine life, according to Parrot's observations, the then indifferent, nearly uniform, grey transparent matter of the cerebral hemispheres becomes differentiated into white matter first at that part immediately

beneath the fissure of Rolando. Of all the cortex of the hemisphere, that forming the "motor" region is the first to be developed. Flechsig, although differing in some details, is yet corroborated in this main fact of development. The pyramidal tract next proceeds downwards through the centrum ovale along the posterior part of the internal capsule, behind the "knee" of this structure, which is formed by the junction of the anterior and posterior bands. In the cerebral peduncle the pyramidal tract occupies generally the middle segment of the lower layer of the crus, and may be seen as an opaque rhomboidal area, when the internal and external segments yet exist as clear spaces, due to the non-development of the medullary sheaths. Owing to the intermingling which takes place, we know but little of the precise arrangement of the fibres under consideration in the pons Varolii. In the medulla the anterior pyramids are the direct pyramidal tracts. The varying amount of decussation, and the situation, size, shape of the direct and crossed pyramidal tracts in the spinal cord are now amongst the more familiar facts of the anatomy of the spinal cord. The knowledge brought to light by developmental, by structural, and by pathological anatomy have conclusively demonstrated the essential contrast between the two constituent parts of a posterior column of the cord. No one can over-estimate the importance of the study of the secondary degenerations of the white fasciculi, not only in the cord but in the brain. A solution of osmic acid has proved of great value in these anatomical studies. In an appendix to the work some fresh evidence of a clinical and anatomical nature is afforded with the view to place amyotrophic lateral sclerosis on a sure autonomous basis. The objections raised by Leyden are here discussed and explained away. With all that we have said, we are afraid that we have done but scant justice to this modern masterpiece. It is but natural that those who read French should prefer the volume in its original dress. Things coming from Charcot, which sound pithily in the foreign tongue, rather lose their freshness when rendered into even readable English.

Artificial Anæsthesia and Anæsthetics. By HENRY M. LYMAN, A.M., M.D. London: Sampson Low and Co. 1882.

IF we were asked to write a thesis in support of the proposition that the subject of artificial anæsthesia and anæsthetics was of sufficient importance to require a separate literature, we confess that we should not feel very intensely on the matter, and probably our arguments would be correspondingly lame. Dr. Lyman has, however, composed a work of over 300 pages, and has brought together a large amount of miscellaneous information. In the preface he says "the practised expert will everywhere recognise the quality of Perrin, of Snow, of Simpson, of Sansom, of Anstie, of Turnbull, of Kappeler, and of Rottenstein." No doubt the treatise has been finished at the cost of a great deal of constructive energy, the materials from the various sources having been welded together in a systematic whole by the author; for this labour Dr. Lyman deserves much credit as well as for the modest way in which he speaks of his own share in the work. An opening chapter is devoted to the History of Anæsthesia, in this sundry allusions to ancient authors are made, showing that from the earliest ages of antiquity man has continually sought for the means of obtaining relief from pain. The phenomena observed in the course of the administration of an anæsthetic are carefully described, and the physiology of anæsthesia is fairly well entered into. Attention is next directed to the administration of anæsthetics, the method of producing anæsthesia, and the various forms of inhalers in use. Accidents and the treatment of these are explained; some illustrative cases of apparent death in which restoration was effected by many simple means are also quoted from medical journals. Another chapter gives an account of many Anæsthetic Mixtures which have been suggested with the hope of diminishing the perils of anæsthesia from the use of chloroform alone. Artificial Anæsthesia and Anæsthesia in Dentistry are the titles of the following two sections. Local Anæsthesia receives adequate consideration, as also does the important question of the Mortality of Artificial Anæsthesia. The Medico-legal Relations of Anæsthesia are of the first importance, and of a very extensive nature. Dr. Lyman mentions most of the many aspects of this subject, and illustrates them by means of reported cases. A description of all the chief Anæsthetic Substances occupies the remaining, and by far the largest, part of the book. Under the heading of Chloroform, the author has collected 393 cases of sudden death from the inhalation of this anæsthetic. Of these, the sex was recorded 370 times, 262 were males and 108 were females. Death occurred 15 times at the commencement of inhalation, 99 times before complete insensibility set in, 70 times whilst the patient was fully unconscious, and 35 times after the completion of the operation (out of a total of 219 available records). Some more tables are given, including one showing the nature of the operation for the performance of which the chloroform was administered. Under the chapter on Ethidene Dichloride, two recorded cases of death from the use of this agency are briefly sketched. The administration of amylene has been followed by death in two cases reported in the *Medical Times and Gazette*, 1857. Alcohol is fully treated of, both from a chemical and physiological standpoint. Cases of death caused by the inhalation of ether, and of nitrous oxide gas are also incorporated in the work. The question of the Production of Anæsthesia by Rapid Breathing and by Electricity occupies the brief concluding chapters.

COMPOUND DEPRESSED FRACTURE OF SKULL; RECOVERY WITHOUT OPERATION.

To the Editor of THE LANCET.

SIR,—The following case may prove interesting to your readers:—

James G——, aged four, was brought into the Ancoats Hospital suffering from an injury to the head inflicted by a blow from a "merry-go-round" driven by steam power. On examination there was found a compound depressed fracture of the frontal bone immediately below the right frontal eminence. The depression, which was a quarter of an inch in depth, was irregularly triangular in shape, one inch and a half long, and half an inch broad. The wound bled considerably. The child, however, exhibited no signs of concussion, compression, or cerebral irritation; in fact, fright appeared to be the only thing troubling him; hence no operative interference was deemed advisable. The wound was dressed with lint and carbolic lotion (1 in 40), a bandage applied, and the child put to bed. Next day the temperature rose one degree above normal, and there was slight flushing of the face. Ten grains of compound jalap powder were given, the wound dressed in the same manner as before, and a light milk diet ordered. For the next six days the wound, which was dressed daily, healed rapidly, the bowels being kept freely opened, no adverse symptoms meantime supervening. At the end of the tenth day after admission the child was transferred to the out-patient department, and has since made an excellent recovery, the wound having healed up, leaving only a depression at the seat of injury.

I am, Sir, yours truly,

CHARLES ROBERTSON,
Junior House-Surgeon.

Ancoats Hospital, Manchester, July 22nd, 1883.

THE Michigan Legislature has just passed, by a nearly unanimous vote, a Bill requiring school teachers to pass an examination in physiology and hygiene, with particular reference to the effects of stimulants and narcotics on the human system.

THE LANCET.

LONDON: SATURDAY, AUGUST 11, 1883.

IT must always be a difficult task to write an Address, whether designed to be of a general nature or meant to treat of a special subject. Indeed, the difficulty might be said to increase year by year in almost more than an arithmetical ratio, were it not for the fact that knowledge grows apace, and so lends a helping hand in providing a *raison d'être* for an address in this or that sphere of medical action. Though the weekly press and other magazines chiefly serve the purpose of spreading information, yet the method of vocal publication adopted at such gatherings as that which met at Liverpool last week comes as a relief and extra stimulant. No one will deny that all the addresses were of average excellence, and some indeed transcended this level. One of the orations which gave us considerable pleasure was that delivered with much quiet learning by Dr. SAMUEL GEE. THEOPHILUS DE GARENCIÈRES published in London in 1647 a small book, entitled "Angliæ Flagellum seu Tabes Anglica," of which there is a copy in the possession of the Medical Society. Dr. GEE says that, although this book has been largely quoted, especially by the Germans, as a treatise on rickets, yet it really relates to a kind of pulmonary consumption. How fair, then, is the criticism that the title misled them, and that the learning of too many goes no further than the title-page, and this at second-hand!

Professor SCHAEFER gave a very lucid account of the structure of the animal cell; he traced its histological history from the time of SCHWANN up to the most recent date. Within the past five years it is no exaggeration to say that cellular microscopy has almost gone through a second christening. The reticular structure in the cell protoplasm and in the nucleus are practically new facts. And if it should turn out that the fibrils described in muscle, ciliated cells, and nerve-cells are structurally specialised from a more embryonic diffuse reticulated form, the doctrine that function and structure go as nearly as possible hand in hand, although the former seems to precede the latter, will receive further support. "Karyoplasm," "nuclear juice," or "matrix," are some of the new expressions which have been introduced in accomplishing this transition of the vesicular nucleus into a reticular formation. "Karyo-kinesis" is the term now used for the process of division of nuclei—a more difficult matter to describe now than it was but a little while ago.

It was only natural to suppose that the address in the Pathological Section would be chiefly occupied with the consideration of questions in which the tubercle bacillus plays an important part. Dr. GREEN has worked so well at the pathology of phthisis that it may be worth while to bring into prominence the three propositions at which he has arrived in this connexion:—1. The morbid processes which lead to phthisical consolidation of the lung are inflammatory in their nature; by which it is simply meant to imply that they owe their origin to some kind of injury of the pulmonary tissues. 2. Phthisical consolidation of the lung differs from most other forms of pneumonic consolidation, inasmuch as it exercises an injurious influence upon the adjacent and distant pulmonary tissues, and thus tends to spread. To this infective property, which varies very considerably in different cases and under different circumstances, the progressive character of phthisical consolidation is largely due. 3. The infectiveness of phthisical consolidation is, in all probability, due to changes in the inflammatory products, for the occurrence of which the presence of organisms is a necessary condition. As Dr. GREEN says, if we appeal to clinical medicine, the greatest, and what seems to some the insurmountable, objection to the acceptance of the tubercle bacillus as an essential element in the causation of phthisis, is the fact that clinical experience seems to be altogether opposed to the view that this disease is communicable. In considering the question of communicability or contagiousness, however, it must be borne in mind that something more than the presence of the bacillus is obviously necessary to produce phthisis. This second factor is something inherent in and peculiar to the individual. Such are the opinions of one who is most inclined to accept KOCH'S teachings.

Dr. GRAILY HEWITT'S address contained an exposition of his views on the question of food in obstetric and gynæcological practice. He believes that weakness, delicacy, and so forth are associated with and caused by a long continued inadequate dietary, and that it is essentially what may be termed "chronic starvation." This chronic starvation is believed to be the efficient cause of much uterine and ovarian disease. Owing to this continuous insufficiency of food the tissues of the uterus and ovaries would appear to suffer more than those of any other organ of the body. At least we think this is a fair deduction from the views expressed by Dr. HEWITT. We must confess not to be able to completely accord with these doctrines. Is it not too much to suppose that chronic starvation weakens and diseases the organs of generation, and then that the affections of this system disturb the general health? The whole body may suffer as a consequence of such deficiency of diet, but why should the generative organs be specially selected as the seat of disease?

The address by Mr. REGINALD HARRISON combined the results of personal experience with an able and enthusiastic account of the recent advances in the surgery of the urinary organs. Amongst many valuable contributions to the literature of the subject of renal surgery, Mr. HARRISON would include one by Dr. HARRIS of Philadelphia, which contains an analysis of one hundred cases of nephrectomy. From this and other communications we may draw at least three conclusions. These are:—1. That nephrectomy has been the means of saving many lives under circumstances where no other method of treatment was likely to be of service. 2. That this operation has been practised in cases where the probability of a successful termination appeared to be very remote. 3. That a method of effecting the removal of the organ different from that which was selected, or a procedure less heroic, might in some instances have tended to increase the chances of success. In the surgery of the bladder Mr. HARRISON lays special stress on the valuable papers of Dr. OTIS, of New York, on the dilatability of

the urethra, whereby much larger instruments than were generally employed can be made to pass with safety, and of Dr. BIGELOW on the removal of stone from the bladder by crushing and withdrawing it at a single operation; the latter communication clearly showing how much disturbance the bladder can tolerate. Tumours of the bladder also occupied a part of Mr. HARRISON'S address, but this matter is still so fresh in the minds of our readers that we need refer no further to it here. In regard to the question of prostatic stricture, Mr. HARRISON entertains some very clear views. Whenever he sees, in the post-mortem room, an ordinary specimen of dilated kidney, tortuous ureter or sacculated bladder, associated with an enlarged prostate, or a stricture, the expression "misdirected force" almost involuntarily occurs to him. He believes that the treatment for prostatic stricture commences, as a rule, too late. The operative treatment of the enlarged prostate, when it obstructs micturition to a degree that cannot be met by judicious catheterism, is yet, he thinks, open to considerable improvement. For the purpose of securing a more or less permanent channel for the escape of urine from the bladder, other than by the urethra, Mr. HARRISON has a decided preference for an incision through the perineum, on the twofold ground of safety and comfort. He has obtained gratifying results in cases of enlarged prostate by a method of puncturing the bladder through the enlarged gland by means of a trocar from the perineum. This method has received the approval of Dr. GROSS. Division of the prostatic obstruction at the neck of the bladder from an opening made into the membranous urethra is a procedure which Mr. HARRISON recommends when the bladder has not got into a condition of confirmed and irremediable atony. Internal urethrotomy as treatment for urethral stricture is not at all liked. He is quite willing to admit that in some cases it may be a necessity, but to recommend it as capable of effecting a permanent cure he considers, rightly or wrongly, as quite another thing. It will thus be seen that Mr. HARRISON touched upon nearly all the important features of his subject in a confident and hopeful manner.

The last address, although delivered first in point of time, which we shall comment upon is that of the PRESIDENT. This was an able general survey of the present aspect and future prospects of medicine. The striking results of physical inquiry in pulmonary and cardiac diseases were alluded to as instancing the value of the introduction into our practice of instruments of precision. We think that the case for the results of physical inquiry was a little over-estimated. It is true that in the majority of cases when consolidation of the lung is diagnosed during life it is found post mortem, but not always. We have known consolidation diagnosed during life turn out to be purulent effusion after death, and that by men of no mean powers of percussion and auscultation. Still, these exceptions hardly influence the general train of thought which the PRESIDENT had in mind. As he said, there is a verification in its minute details of the diagnosis that was made; and the student is apt, perhaps, at once to conclude that medicine is one of the most exact of the sciences. Dr. WATERS stated what is perhaps not generally known—that Dr. CURRIE of Liverpool was the pioneer, in the early part of the present century, in the use of cold applications to the surface of the body in the treatment of fevers. The valuable properties of the thermometer, of the laryngoscope, and of the sphygmograph were all passed in review. "In considering the standpoint of medicine we should always bear in mind that medicine must be judged by the therapeutic results which it achieves; and in proportion as we can show that the researches of the physiologist, the pathologist, and the chemist, and the application of scientific principles, have enabled the physician to deal more successfully with disease, &c., so do we establish for our art a claim on the confidence and gratitude of mankind." However much we may have at heart the welfare of pure science, we must recognise the truth of this quotation from the PRESIDENT'S address.

AMONGST the contributions which have resulted from the possibility of an importation of cholera into this country, we note several which view the danger from somewhat widely different points. Dr. C. CREIGHTON, in an article on "The Importation of Disease," in the *Fortnightly Review*, deals with two diseases with which this country is threatened—namely, cholera in man and foot-and-mouth disease amongst animals. As regards both diseases he strongly condemns the dogmatism that would invariably attribute all importations of infection, whether from a fountain-head on the Ganges, or from one of the countries from which we happen at the time to be importing live-stock. He leans to the view that infectiveness is a matter of development; that, as regards cholera, the discharges of the sick may, under special local conditions, acquire certain aggravating circumstances to make them potent; and that these conditions are generally attained when the sick are herded together on board-ship under a system of quarantine, or shut up and left to themselves by means of sanitary cordons. On the other hand, he holds that just as the virulence of the choleraic discharges may be intensified indefinitely, so again that virulence may be diminished by such action as good scavenging and common cleanliness. It is a well-known fact that an important proportion of the cases at the commencement and termination of a cholera outbreak may be regarded as being cases of diarrhœa. This diarrhœa is, however, charged with "a potential infectiveness," and in many cases it is more than probable that if the same care were bestowed upon the early diarrhœal attacks as is in this country bestowed on doubtful cases of enteric fever, the disease would never become cholera at all. As regards the Damietta outbreak, Dr. CREIGHTON points out, as we have done, how the local circumstances of filth, coupled with the aggregation together of large numbers of people at a fair, resemble the same circumstances under which some of our Indian epidemics have originated, and he considers the disease as having been originally a local form of sickness which became "communicable under certain aggravating conditions." This view as to the origin of certain forms of infection has of late years steadily gained ground, and it was more fully developed in the paper which Dr. CREIGHTON has just read at Liverpool on "The Autonomous Life of Specific Infections." The remedial measures which are suggested by this view are precisely those on which we rely in this country, where the cholera poison, doubtless owing largely to

local conditions of climate, tends to be in the main restricted to places where the discharges of the patients are received, instead of becoming scattered aerially, as it so easily may be, after the discharges have been desiccated under the action of a dry heat in a tropical country.

Professor TYNDALL deals with a similar subject in the daily press. He, too, urges that it is the poisonous ejecta which should be dealt with in order to prevent the spread of infection; but he differs from Dr. CREIGHTON in regarding the importation of the specific infection from an antecedent case as essential to an outbreak, and, comparing cholera with enteric fever, he quotes Dr. WM. BUDD'S experiences at Bristol and Dr. THORNE THORNE'S experience in the Caterham epidemic as bearing out that view. Probably Professor TYNDALL is right as regards this country, where we fortunately do not possess the conditions necessary to give the needed virulence which would, under Dr. CREIGHTON'S view, convert an otherwise non-specific diarrhœal outbreak into a communicable epidemic. But our English experience can hardly be looked upon as deciding this question as regards countries where very different circumstances obtain.

In the *Nineteenth Century* Dr. PERCY FRANKLAND refers to cholera in connexion with our water-supply. He records the statistics of the previous epidemics, and reminds us of the labours of the late Dr. FARR and of Mr. NETTEN RADCLIFFE, who were able to show how special an incidence of cholera there was in certain parts of the metropolis which were supplied with a water liable to be fouled by means of sewage; and the writer ends by advocating the entire abandonment of a water-service which is liable to the risk of such pollution.

Notwithstanding the divergent views as to the etiology of the cholera poison, and the different degrees of importance which the several authorities would respectively assign to one or another channel of infection, there is one point on which all are fortunately agreed, and that is as to the imperative importance of cleanliness, whether by way of depriving an organism of the means by which it might put on its power for virulence and harm, or of removing a medium in which an imported infection might propagate and multiply itself. We have yet much to learn as regards cholera and its contagium; but we do know that by the removal of all sources of filthiness from about our houses, our towns, and our water-services, we get rid of the principal conditions which favour the epidemic prevalence of that disease.

DR. HENRY MAUDSLEY'S new book, "Body and Will," is wondrously clever as a speculative essay on the subject of which it treats, but it is a mistake: a mistake in policy; and a mistake—a very grave one indeed—in science. The author is held in such very high esteem by the specialty to which he belongs that it may seem disloyal to give expression to this opinion; but the time has arrived when it is desirable to speak out, and very plainly too, on the subject of the new departure in physiological psychology of which Dr. MAUDSLEY is regarded, and probably regards himself, as the originator. If we describe his gift as that of cleverness rather than wisdom, it is in no disrespectful spirit that we make the discrimination. Dr. MAUDSLEY'S philosophy as a whole—and this book, which may be taken as its latest embodiment, in particular—must be characterised as a peculiarly aggressive development of Agnosticism. His supreme pleasure in literature would seem to be the sad delight of demolishing the hopes and beliefs of his fellow-mortals. He is never weary of reminding them of their mortality, and never so happy as when he has twisted a coil of argument around the tortured consciousness, and convinced himself and his reader—for the moment at least—that there is nothing to look for beyond the grave. At times he indulges in this grim humour to the extreme; for example, when he argues that "To us who are alive it may seem incredible that death can be the adequate end of such a long succession and such a vast complexity of life; but it is incredible only because we are alive and conceive things according to our own measure; it will be more credible to each of us when he is nearly dead, and not incredible at all when he is dead." According to Dr. MAUDSLEY'S view of matters, when a man is dead there is an end of him, so that the concluding remark, which must needs give offence to many, has not even the excuse of a paradox. The quotation with which the book before us closes is a fair epitome of the lesson which the author would teach: "All that which is past is as a Dream; and he that hopes or depends upon Time coming, dreams waking."

We say the book is a mistake of policy, because it is not either prudent or justifiable for any man to make a demonstration against the accepted view of things unless he has something better—at least in his own estimation—to substitute for that which he would sweep away. Now, no thoughtful person can read Dr. MAUDSLEY'S writings without feeling that the mind of their author is unsatisfied if not unstable. In every page there are indications of the turmoil which is going on within it. He asserts his avowed convictions with more vehemence than belongs to calm persuasion, and he attacks those who differ from him with too much bitterness and impetuosity for a philosopher who is sure of his ground. Dr. MAUDSLEY really ought to feel sorry to be driven to the humiliating conclusion at which he thinks he has arrived; and seeing that it is not a gospel of hope or encouragement that he has to preach, should have some pity for his kind and hold his peace. The utmost consolation he has to offer the world is that which he states thus concisely in the Pathology of Mind:—"So long as man has organic viscera he will have emotion enough, whatever his beliefs and disbeliefs may be: there need be no fear that he will lose his emotional nature and become a hard intellectual machine when he no longer puts up prayer or offers sacrifice to a personal God of like nature and passions with himself." Meanwhile, as he remarks in another place, "Herein lies the imputable mischief of prayer, that it is an imbecility of the will." Obviously thoughts like these—even if they be truths to the thinker—are not worth expressing; nor, as a matter of fact, would they be expressed if he were as well assured of their truth as he would have us believe him to be. Dr. MAUDSLEY is *not* sure of his ground. He contradicts himself at every twist and turn, and it is well for the sake of the young and inexperienced in scientific life who may be captivated by his forcible and most excellent diction that the fact should be stated. In the preface to this new book he anticipates the objection of "adepts in the schools of high mental philosophy," and in justification of his view pleads

that he has been all his life "dealing with mind in its concrete human embodiments." According to the author, mind can have no existence except in the concrete, so that the explanation offered is obviously unnecessary. Even in this matter, however, Dr. MAUDSLEY is not accurate. It is evident in the present, as in other of his works, that the concrete mind with which he has been dealing all his life is simply his own individual consciousness. What he describes as the phenomena of brain-function not his own he has derived from other writers, and in the use he makes of the material taken from divers sources he is either not precise or not intelligent, as witness the quotations and paraphrases of passages from Scripture and from the writings of many divines, with which this and his other works are profusely illustrated. That this must be the conclusion at which even his most friendly critics will arrive there can be no question. For example, his view of the future of the human race, a future of degeneracy and of return to worse than primeval savagery, is nothing more than a misapplication of HERBERT SPENCER'S hypothesis of "dissolution," at first sight barely recognisable. Dr. MAUDSLEY is distressed and distresses his readers with alternating attractions and repulsions between the two schools of philosophy and science. So far as the reader can form any clear estimate of the precise position of the author's consciousness, it would seem to be like MAHOMET'S coffin, suspended between heaven and earth, neither able to soar to the one place of rest, nor to bury itself resignedly in the other. For the present the author seems inclined to fall back on the oldest form of faith and pay homage to the Sun. "For us men and for our salvation, the earth and its sun are all in all, but in the universe and its evolution new heavens and new earths may be natural incidents"; and therefore, while denouncing all confidence and hope in the future, he makes the reservation that, "It is perchance a cosmic instinct of the matter of which we are constituted," this "hope and conviction of a future realisation of lofty ideals."

Our principal objection to Dr. MAUDSLEY'S reasoning is its notable lack of relation to the practical. No writer on psychology, as viewed from a physiological and pathological standpoint, makes more frequent allusion to, or lays greater stress upon, the Consciousness than he does; and yet there is no writer, with whose works we are acquainted, who shows less practical acquaintance with the facts of Consciousness, as evidenced by the action of minds other than his own. In illustration of our meaning, take the conception the author has formed of the mental act or state of the suicide. "From a purely psychological point of view," writes Dr. MAUDSLEY, "it [that is, suicide] must be acknowledged the most momentous example of Free-will on human record." He assumes that the person about to commit suicide is convinced of the existence of a life after death, with an alternative of joy or woe, convinced also that suicide will precipitate him into an abyss of endless suffering, but "the unhappy person nevertheless recklessly perpetrates it when his misery on earth is greater than that which he believes he is able to bear." Dr. MAUDSLEY does not perceive that the state of mind he is describing is as far as possible from one of "free will." The man who, because he has more misery now than he can bear, deliberately and knowingly performs an act which he is convinced will "precipitate him into an abyss of endless suffering," must of course be *mad!* The author's love of paradox has led him astray. This is how he argues. "Against it [suicide] there is every motive that can influence a conscious being, so that the act is, *qud* consciousness, the most wonderfully illogical act of which anyone can be guilty: either a stupendous example of free will or a *reductio ad absurdum* of the doctrine." Obviously it is not either. The illogical nature of the act is proof that the intelligent consciousness cannot be sanely concerned in its determination; and it is certainly no *reductio ad absurdum* of the doctrine of free will to say that a man may be insane! As a matter of fact, apparently not observed by Dr. MAUDSLEY, the sane and conscious suicide is *not* "assured that suicide will precipitate him into an abyss of endless suffering." He inclines rather to Dr. MAUDSLEY'S own view—namely, that death is the end of life. It is because he hopes and half believes this strange doctrine to be sound, that he dares the chance of escaping from the misery on earth which he is unable to bear. The logical outcome of this doctrine must be that on the whole suicide is about the most rational act a miserable man can perform. We expose the method and denounce the doctrine—the one is faulty, the other bad. Dr. MAUDSLEY has clearly forgotten that the minds with which he has had to deal have been morbid, and, forgetting this, he has mistaken the product of mental disease for the outcome of a sound and intelligent consciousness. This misconception runs through the whole of Dr. MAUDSLEY'S writings, and it is conspicuously evident in the new volume from his pen. The mistake of the abnormal for the normal underlies the whole essay, and, when it does not vitiate, weakens the force of, the argument. It appears at the very outset, where the author bewails the want of a "Diabolometer or Satanometer," to measure the evil influences exerted on the mind and opposing the good influences, which he summarises, as set forth by Dr. ISAAC BARROW, the divine, and then characterises as "a stupendous array of motives, which it is a standing wonder anyone ever withstands, seeing that they are wielded by the power of Omnipotence and guided by the insight of Omniscience." In Dr. MAUDSLEY'S estimation a free will choice of good in preference to evil, or the converse, would be an act of insanity. This is what his reasoning amounts to. "The person who answers best, who alone answers near, to the metaphysical definition of free will is the madman." The normal human being is, for the author, an organism more or less easily worked upon by those influences which he conceives to be the factors in the production of conduct and character. Education is "manufacturing"; and each act of volition—he does not like the idea of an existing and continuous Will—is the resultant of divers forces operative at the moment, and conditioned by the character, inherited and acquired, of the organism, upon and through which these forces act. The odd part of the business is that, while Dr. MAUDSLEY reduces man to this level and makes him a mere creature of circumstances, he asks: "Is it not obvious that, if sane men possessed free wills, they, like the madman, would be free from responsibility, since their wills would act independently of their characters, just as they listed—not

otherwise than as a wayward wind was once supposed to blow capriciously 'where it listed,'—and that no one would have much, if any, motive left to try to better his character?" The covert sneer at the words of Him who talked with NICODEMUS notwithstanding, how can man be responsible if he is nothing more than a manufactured recording apparatus? Albeit "Body and Will" is, as we have said, a clever work, it is a mischievous one, misleading to the student, and unworthy the pen of a Master in Science and Philosophy.

THE British Medical Association cannot afford to spend the time of its members during the annual meetings with such an obvious question as the treatment of candidates for the membership, or of actual members, holding homœopathic opinions. Such a use of time is objectionable in two ways; first, it is very unprofitable, and secondly, it is very undignified. Perhaps we might add a third objection—that such a discussion serves the uses of homœopathy by advertising it and giving to its followers the appearance of martyrs. It is to be regretted that two eminent members of the Association should have struck a discordant note on this subject two years ago, and should have talked as if there were any room for doubt as to what a body of scientific men should do in the way of recognising or fraternising with those who ostentatiously boast of their antagonism to regular medicine and of their belief in the most absurd dogmas. But it is too late to regret the mistakes of two years ago. What is wanted now is a quiet and dignified rule expressing that the British Medical Association, like all other medical societies not abandoned to fancies and dogmas, repudiates those who live on such fancies. We cannot congratulate the Association on the recent discussion, which appears to have been conducted in a temper unbefitting the subject and the occasion. It is to be desired that ere another meeting the opinions of the various branches of the Association should be ascertained. A resolution to this effect, we understand, was passed. The opinion of the Branches cannot be doubtful, and it may be confidently hoped that it will find such expression before the next annual meeting as to set the question at rest without further discussion. Homœopaths have a very easy way out of their position of isolation. Let them abandon their shibboleth. Their English leaders have practically done so. Let them do so thoroughly. It is not the profession which is narrow in accepting truth from all quarters and countries, and in refusing to talk contradictory nonsense about "laws" of similars and "laws" of contraries. The narrowness rests with those who separate themselves and adopt titles and labels which deceive and mislead the ignorant.

THE Ballymoney guardians seem to be dissatisfied with the return they get in the shape of sanitary work done for the amount of money expended in salaries to officers engaged therein. One hundred and eighty pounds per annum appear to be devoted to the small matter of removing nuisances and providing healthful conditions in the town and outlying districts. This sum is, in the opinion of a majority of the guardians, outrageously disproportionate to value received, and so, in a fit of righteous zeal on behalf of the ratepayers' pockets, they straightway reduce the salaries of the sanitary officers fifteen per cent. How much would an epidemic cost them in money—and life?

Annotations.

"Ne quid nimis."

MR. GLADSTONE ON THE UNITY OF THE MEDICAL PROFESSION

IN the nature of the circumstances, Mr. Gladstone has not been called on to say much on the Medical Bill, but every allusion to it which he has made has been significant of interest in the measure and great appreciation of its objects. On Monday night, in reply to a question, Mr. Gladstone expressed the determination of the Government to proceed with the Bill, and explained the delay on the ground that it had already passed through the House of Lords. "It was the intention," said Mr. Gladstone, "of the Government to proceed with the Medical Acts Amendment Bill, which was based on the principle that the medical profession in the three kingdoms was one body." This is the kernel of the whole matter, and this it is which makes it so essential and seemly to abolish all inequalities of qualification. There is another principle equally fundamental—viz., that qualifications for practice must be threefold, including qualification in medicine, surgery, and midwifery. As we anticipate from the impending legislation a cessation of all international jealousies and disparagements, so we expect to drop out of our vocabulary the expression "only one qualification." A session of Parliament that effects such changes in the organisation and government of the profession will be gratefully remembered.

ISOLATION ARRANGEMENTS FOR THE METROPOLIS.

THE Diseases Prevention (Metropolis) Act, 1883, which has been introduced into the House of Commons by the President of the Local Government Board, and which was read a third time on August 7th, forms a first step towards carrying out the recommendations of the Royal Hospitals Commission as regards the provision of means of isolation for infectious diseases in the metropolis. But that one step falls far short of the total recommendations made. It obviously aims primarily in providing for the due isolation of cholera patients should that disease be imported into London, but its effects will go much further, and they will materially influence the future hospital accommodation for infectious diseases in the metropolis. Whilst the Bill does not take away the power of metropolitan local authorities to provide hospitals, but, on the contrary, gives them increased facilities for that purpose, at the same time it so enlarges the powers of the Metropolitan Asylums Board as in effect to constitute that body the isolation authority for London; and this the more because it is distinctly enacted that the admission of a person suffering from any infectious disease into any hospital provided by the managers, or the maintenance of any such person in such hospital, shall not be considered to be parochial relief, and no person shall be deprived of any right or privilege, or be subject to any disability or disqualification, by reason of his accepting such isolation and maintenance. Thus the question of pauperism, in connexion with the isolation needed for the protection of the public health, is no longer to be a hindrance in the way of a purely sanitary function. Should the Bill pass, it will in all probability be found in the long run to have practically handed over the question of isolation to the Metropolitan Asylums Board, for it is hardly likely that when a single authority has powers to provide hospital accommodation for all classes, irrespective of social status, throughout the whole metropolitan area, other authorities will, except under the influence of some special emergency, undertake similar duties for smaller areas, all included within the greater one. It still remains to be seen how far

the managers will be willing to undertake the increased duties with which it is sought to invest them. Hitherto they have met with the reverse of help from the Government in their efforts to stay the spread of infection; and unless they receive some substantial guarantee that they will, in the performance of their public duties, be able to rely on the support of the central authority, it is by no means unlikely that they may view the extension of their powers with the reverse of favour.

THE SISTERHOOD OF ST. JOHN'S HOUSE AND KING'S COLLEGE HOSPITAL.

IN our issue of the 21st ult. we stated that the Council of St. John's House had accepted the resignation of the ladies forming the sisterhood of that institution, who had resigned their position, and had consequently withdrawn from the charge of the nursing arrangements of King's College and Charing-cross Hospitals. Their reasons for withdrawal have been made public by a series of documents issued on behalf of the sisters to the governors, life governors, and subscribers of St. John's House, King's College Hospital, and Charing-cross Hospital, to which reference has been made in *The Times* and in letters to the *Guardian* of the 8th inst., and other papers. Although their statements are very voluminous, we gather from a careful perusal of the papers before us that the difficulty is a very simple one. In December last the Medical Board of King's College urged the removal of the sister matron on the ground that her line of conduct "had for many years past been adverse to the harmonious working of the hospital, and prejudicial to the interests of the medical school." The Committee of King's College Hospital accepted the resolution, and forwarded it to the Council of St. John's House. The rule of the sister matron had been found to be getting more and more despotic during her sixteen years of supremacy, and on her making a charge against one of the visiting medical officers which could not be substantiated, the Medical Board of the College brought the matter to the official notice of the Committee. The Council of St. John's House agreed with the Committee of the Hospital that her resignation was necessary if the two institutions were to work in accord as hitherto. The position of the nursing sisterhood in relation to the medical staff, as inspired and insisted on by this lady, had been strained for some years past, but this incident brought a lay committee to see that the nursing arrangements were not the only essentials in a hospital, and that the representations of the doctors must also be taken into consideration. The sister matron was therefore asked to resign her position as sister-in-charge at King's College Hospital, and after many delays she did so. It was supposed that another sister would take her place, and that no crisis would have arisen. All the sisters, however, made common cause with their superior, and so what was merely a personal question has become a general strike. The nurses at King's College Hospital, with a very few exceptions, remain at their duties, and show a devotion and an interest in their work which we should scarcely have expected when the ladies had, on class principles, forgotten that their duties were imperative. Such a withdrawal rather resembles the action of trades-unionists than that of philanthropic ladies, who might have remained at their posts of duty under protest, and would have had our sympathy in so doing. The question is simply this: Will King's College Hospital be nursed on a contract system by St. John's House, or will it organise an independent system? St. John's House, according to the letter of its treasurer in this week's *Guardian*, will go on with its work, and, with a new set of sisters, will endeavour to keep its position in the nursing world. It seems to us a terrible *fiasco* if the ill-judged course of action of one sister can destroy such a valuable institution. It has done most estimable work in improving details of nursing; but we cannot for one moment allow that there is any "moral and religious position" at stake. Other sisterhoods in metropolitan and provincial hospitals have as high a moral and religious tone as the sisterhood of St. John's House; and we must strongly object to such a point being raised when the resignation of a single sister is the only question at issue. In 1874, the committee and the medical staff of King's College Hospital were divided in opinion, but now the medical staff, the lay committee of King's College Hospital, and the Council of St. John's House all testify to the necessity of the resignation of the sister matron; and when we consider that in 1874 these various bodies were in her favour, we can only deplore that, by the circulars in her behalf, she should have brought into prominence what is really not a general question but a personal grievance. Mr. Bartle Frere's letter in the *Guardian* is so plainly and so fairly written that no answer but one denying the facts, which we hardly believe can be forthcoming, can seriously affect the position of either St. John's House or the Committee of King's College Hospital. It seems hard to believe that a nursing sisterhood will imperil its future work in consequence of a difficulty between the lady who has put herself at the head of the movement and the authorities who must regulate the internal arrangements of the institution which the governors have handed over to them for general supervision and management, and in which they are supported by the Council of the institution to which the lady belongs. It would have been far better if the Council of St. John's House had asserted its position before such a question had arisen.

THE COUVREUSE, OR MECHANICAL NURSE.

AFTER two years' trial, the *couvreuse* has proved so decided a success that a brief description of this ingenious contrivance may be desirable. It was in 1878 that Dr. Tarnier, when visiting the apparatus devised by M. Odile Martin for artificially hatching and rearing chickens at the Jardin d'Acclimatation, suggested that a similar method might be applied with advantage to infants, especially in cases of premature birth. Two years elapsed, however, before any attempt was made to carry out this proposal; but in the course of the year 1880 a *couvreuse* was made, and brought to the hospital of the Maternité. This is a plain wooden case or box, measuring about 2 ft. 8 in. by 2 ft. 4 in., and 2 ft. 4 in. in height. The box has a double covering, the space between being filled with sawdust to retain the heat, and is divided into two parts. The lower half contains a reservoir, which holds about sixty litres of water, and is fed by a patent boiler that stands outside the box, and is warmed by an oil lamp; or hot water may be used without recourse to the lamp. The upper portion of the box forms a warm chamber, where a little basket or cradle is placed, large enough to hold two infants. From an opening at the side, this cradle may be withdrawn, while the top of the box has a double glass covering, so that the children and the thermometer lying by their side can be constantly watched. If the water used in the first instance is cold, it takes a long time to attain the required temperature; but once this is done the lamp need only be relit three or four times during the course of the day. It is best to warm the apparatus while the infants are being fed or washed. The temperature within the *couvreuse* is generally maintained at 86° F., and though the contrast on withdrawing the child to be fed or washed is very great, amounting often to 30° F., colds are not so frequent as among the infants nursed in the ordinary manner. Altogether the experiment is considered so successful, that it is proposed to supply all the hospitals of France with a *couvreuse*, and there is every reason to anticipate good

results from this measure. Nor is this all. A small portable *couvreuse* is now about to be tried which could be carried by hand from house to house. After this we shall probably have perambulators constructed on the same model. In conclusion, we should remark that, though no very careful experiments have been made with respect to the ventilation within the *couvreuse*, yet this is evidently sufficient. Apertures are made in the lower portion of the box, the fresh air travels over the hot-water reservoir, and is thus warmed before it reaches the child. The very great difference of temperature within the *couvreuse* ensures a constant current of air, though the child is protected by its cradle and clothes from any draught.

THE REGISTRAR-GENERAL'S QUARTERLY RETURN.

THE Registrar-General, in his Quarterly Return for the three months ending June last, which has just been issued, reports that the public health last quarter, measured by its mortality statistics, was slightly above the average for the ten preceding corresponding quarters, but compared unfavourably with that which prevailed in the second quarters of 1881 and 1882, when the death-rate was exceptionally low. The rate of mortality from the principal zymotic diseases last quarter was, however, considerably below the average, and lower than in the corresponding period of any year since 1870. This fact may be accepted as evidence of satisfactory sanitary condition; and the increase in the death-rate last quarter, compared with that which prevailed in the corresponding periods of 1881 and 1882, may be attributed to the low and ungenial temperature during the greater part of March. The mortality from small-pox, measles, scarlet fever, whooping-cough, "fever" (including typhus, enteric, and simple or undefined), and diarrhœa was individually and collectively much below the average; the death-rate from diphtheria alone showing an excess. The statistics of urban and rural mortality in the present return point conclusively to the marked improvement in the health of towns, which has been continuous since the Public Health Acts of 1872 and 1875 came fully into operation. The death-rate last quarter was equal to 20·8 per 1000 in the principal urban populations, consisting of about 16,000,000; while it was 19·0 in the remaining or rural population. The urban mortality was 3 per cent. below the average, whereas the rural rate corresponded with the average. The relative excess of urban mortality has been steadily declining of late, and was last quarter considerably below the average. This is partly due to the fact that the sanitary condition of towns was in more urgent need of reform at the time the Public Health Acts were passed, but also partly, no doubt, to the want of energy and reality in the sanitary organisation of a large number of our rural sanitary districts.

"A STITCH IN TIME."

THE Director-General of the Assistance Publique has asked the Municipal Council of Paris for a vote of credit to the amount of 1,500,000 francs for the purpose of constructing a provisional hospital of 600 beds in order to provide for the possible advent of cholera. A commission was charged to inquire into the matter, and in their report it was considered that a sum of 400,000 francs would be sufficient for the construction of booths to accommodate a hundred patients of each sex. These barracks are to be laid out on one of the bastions of the line of fortifications. Ultimately, in the event or not of cholera, the building might be used for contagious diseases, such as small-pox, typhoid fever, &c. At the session on July 27th the Municipal Council adopted the report of the commission, and voted an extra fund of 80,000 francs for linen and other furniture.

ARMY MEDICAL DEPARTMENT.

WE have received a letter from Dr. Cartwright Reed containing suggestions for remodelling the Army Medical Service, based on his observations in the field in South Africa and Turkey. They may be briefly stated as the formation of a new department of Army Medical Stores, under a medical director, with a staff of ordnance (medical) officers, who would be responsible for the issue of all equipment and supplies, and for the transport of sick and wounded; the formation of a staff of head cooks specially certified as to efficiency; the re-establishment of apothecaries; and the enlistment of a better class of men for the Army Hospital Corps. We do not think the division of the department into two distinct branches would tend to efficiency. That an improvement is requisite in the transport arrangements for the Medical Service is a well recognised fact, which we trust will receive careful consideration from Dr. Crawford, but we do not think Dr. Reed's proposed plan would meet the practical difficulty. It is also undoubtedly desirable that a better class of men should, if possible, be enlisted for the Army Hospital Corps; but Dr. Reed does not suggest, nor do we quite see, how this is to be effected, and the experience which the older officers in the army have had of the class of apothecaries has not been such, we believe, as to lead them to desire to have that grade again introduced into the service. The defects in the cooking arrangements in Egypt were so manifest that we trust there will no longer be any difficulty made on the part of the Treasury to an increase in the strength of the Army Hospital Corps sufficient to enable a certain proportion of the men to be thoroughly instructed in cooking before they are required to begin their regular duty, and that it will sanction the expense of competent instructors for them in this important branch of hospital work. Good cooking and good nursing are two most essential factors in the successful treatment of disease, and neither of them can be had without careful instruction and a certain amount of practical training under skilled supervision.

FORMATION OF HIPPURIC ACID IN MAN.

ACCORDING to Bunge and Schmiedeberg, the conversion of benzoic into hippuric acid, which results from the ingestion of the former substance, is carried out, in the dog at least, in the kidneys only. Salkowski has shown, however, that in the rabbit the transformation may occur not only in the kidney, but also in the liver and muscular tissue. An opportunity of studying the influence of the kidney in the above respect presents itself when that organ is the seat of disease. Jaarswell and Stockvis arrived at the general conclusion that renal lesions often have an influence on the metamorphosis of benzoic into hippuric acid; that influence is most marked when there is parenchymatous nephritis, much less manifest in cases of lardaceous degeneration, and not perceptible when interstitial nephritis is present. Kronecker's investigations led him to the opinion that interstitial nephritis may hinder to a considerable extent the conversion of benzoic into hippuric acid; he also found that the elimination of benzoic acid as such takes place in all forms of nephritis, and that the proportion of hippuric acid eliminated was more scanty as the renal disease was more pronounced. From the researches of Schmiedeberg it appears that not only can the animal organism bring about a synthesis, but also an analysis or splitting up of hippuric acid. The agent which determines this destruction is a ferment which is named "hystozyme." This ferment is present in several organs, in the renal amongst others. If, therefore, on the exhibition of benzoic acid very little or no hippuric acid is discovered in the urine, we ought to inquire whether the hystozyme is present in the organism in larger quantity or greater activity than usual, or whether the synthesis has never taken place between glycocol and benzoic acid. Kronecker

has been unable to draw any certain conclusions in this direction from his experiments. Though he found that the administration of benzoate of soda in two cases of typhoid fever gave rise to the appearance of but trivial quantities of benzoic acid in the urine, the result could hardly be reconciled with the notion that the ferment was developed in excessive quantities.

DUSTYARD CONTAMINATION OF WATER SUPPLY.

WHEN the Technical Committee of the Paris Municipal Council came over to London last April we noticed the criticisms of Dr. E. Vallin on English sanitation. The commission was taken to visit the filtering beds of the Southwark and Vauxhall Water Company, and Dr. Vallin complained that though there were railways and roads, habitations and much traffic around the reservoirs, the water was not covered. But, worse than all this, there was close at hand a large dustyard where tons of refuse are daily sorted. Considering all that has been said, during the last few weeks, concerning the dustbin and the dangers that arise from its unwholesome contents, it is not surprising that all who have noticed this most unfortunate circumstance should be seriously alarmed. A correspondent writing to us on the subject urges that a more ingenious method of disseminating disease by infecting the drinking water could not be devised. The dust is not only deposited here, but it is all carefully sifted by poor women who shake it up in sifters and sort out whatever may be of value. Thus the contents of thousands of dustbins are stirred up, not a particle is allowed to rest, but is so shaken that some portion at least cannot fail to be conveyed by the wind to the neighbouring supply of drinking water. It is true that the water, which everyone must have noticed, immediately after passing Grosvenor-road station and bridge, is filtered; but it is notorious that filtering will not arrest organic matter in solution. This grievance has been pointed out many times before. It is obvious to all who travel on the Brighton, or London, Chatham, and Dover lines, for both the water-supply and the dustyard can be seen from the carriage window; and it is scarcely a hopeful sign to find that, though so much publicity is thus incidentally given to this abomination, it is not yet abolished.

CHARGE AGAINST A MIDWIFE.

IT is much to be regretted that more strict surveillance over the working of the Births and Deaths Registration Act of 1874 is not exercised. The practice of burying deceased infants as stillborn is undoubtedly of common occurrence. Clause 18 of the Act mentioned was intended to limit, if not to put a stop to, the concealment of crime or negligence in this respect. An apparently flagrant case of breaking the law was brought under the notice of Dr. Danford Thomas on the 4th inst. under the following circumstances. Mrs. Gilies, the midwife, stands on remand from Marlborough-street Police-court on a charge of having unlawfully disposed of the body of an illegitimate deceased male child. The reputed father stated in evidence that the mother was delivered of a male child on the 20th of last month, she being attended by the midwife, and that early on the following morning the child died. In answer to questions from the alleged father the midwife said she could get the body buried for the sum of five shillings, and at nine o'clock on the day of the death she took the body away, stating that it would be buried by an undertaker. On this understanding she received the sum in question. Mrs. Gilies then appears to have gone directly to the Middlesex Hospital with the tale that the body was that of a stillborn infant, and on this representation the porter accepted the subject for use in the practical anatomy class. After the examination of the body it was discovered that the child had lived, and that its death had probably resulted from debility and exhaustion from weakness at birth. Before Dr. Thomas the midwife stated that the father of the child told her that he was unable to bury the infant, and after some conversation she told him that she could not give a certificate, but that she could take it to the Middlesex Hospital and get the doctors to see it, and if they were satisfied then the body should be properly buried for the sum referred to. Having carried the deceased there she claims to have forgotten all about it till after the lapse of a fortnight. Witness asserted that she had never taken any other than stillborn children to the hospital, nor had she ever given any certificates for children who had lived. The jury returned a verdict of death from natural causes, but added a rider in which, setting aside the statements of the midwife, they considered that she was amenable to the law, and further added that they would suggest that more stringent measures should be adopted at the Middlesex Hospital to ascertain whether or no such children brought to the hospital are stillborn or otherwise. Looking to the difficulties of diagnosis of stillbirth, we maintain that the practice of this and every other medical school is entirely without blame in the matter. It can hardly be expected of the management to inquire further than of the person bringing the dead body, and yet outside the realms of a post-mortem examination no other kind of evidence is available. If any stigma on the authorities of the medical school is suggested by the wording of the rider, we fail to see the grounds for such an accusation; although we should be glad of the adoption of more stringent measures both in order to prevent the concealment of crime or negligence, and for the better performance of the birth and death registration statistics.

CHOLERA AND RAGS.

ALTHOUGH it is not believed that cholera has ever been imported into England by means of rags, yet infected linen and clothes must be regarded as a medium by which the infection may be conveyed. Hence the Order and Memorandum on this subject just issued by the Local Government Board should be strictly acted on at all ports or other places by which rags from the East may find an entrance to this country. Probably nothing but heat can be relied on to secure complete disinfection of rags, the more so as they are often made up in compressed bales, the opening out of which with a view to exposure in detail to some disinfectant would be all but impracticable. This heat should reach a minimum of 250° F., and it should penetrate every portion of the bale. Dry heat can effect this, but only after the lapse of many hours; and hence we note that Dr. Buchanan suggests that the high-pressure steam apparatus is, for this purpose, the most trustworthy.

THE BRISTOL MEDICAL SCHOOL.

WE deeply regret that the pressure on our space will not allow us to publish an address by Dr. Beddoe on the recent occasion of delivering the prizes to the successful students of the Bristol Medical School. The school seems to be in a thriving way. Dr. Markham Skerritt, in his report, as hon. secretary, mentioned thirty-eight new entries, as against twenty-seven last year, and ninety as the total number of students, as against sixty-seven at the same period of last year. Dr. Beddoe's address on medicine was one of the most thoughtful and suggestive which it has been our lot to read for a long time, full of pleasant learning, practical sense and liberal feeling. It would well repay our readers to possess themselves of the *Bristol Mercury and Daily Post* of July 24th, in which it is fully reported.

PORRO'S OPERATION.

SURVIVORSHIP of mother and child, according to reports of the *Gazzetta degli Ospitali* of the 4th and 25th ult., attended the performance of Porro's operation on June 17th by Dr Ferdinando Franzolini of Udine. The patient, aged thirty-four, had been married four years, and miscarried three times. She was much deformed from rickets, and the entrance to the pelvis was so much narrowed by projection of the sacral promontory as to render ineffectual the violent labour pains; these had lasted fifty hours, and the membranes had been ruptured twenty-six hours. The os was high, but sufficiently dilated to admit the tips of three fingers. Head presentation; fœtal heart beats clearly perceptible. In compliance with the urgent entreaties of both parents, Dr. Franzolini determined on the removal of the gravid uterus and appendages as affording the best chance of survivorship to mother and child, and as the only effectual way of avoiding placing life in jeopardy by another pregnancy. Chloroform having been administered, the gravid uterus was brought out of the abdomen through an excision extending from an inch and a half above the pubes to a point two inches above the umbilicus. After removal of the uterus the stump was fixed in the lower angle of the wound. The wound, which was dressed with purified tow, charged with ten per cent. of carbolic acid, healed in great part by the first intention. The temperature only exceeded 100° on the third day, and then very slightly. From the third day the child took the breast, and continued to thrive with no other nourishment. The peduncle separated on the fifth day. On the sixteenth day after the operation the patient left her bed, and Dr. Franzolini had the well-earned satisfaction of watching the uninterrupted progress of mother and child.

ASYLUMS IN EGYPT.

INDIGNATION has been justly excited by a revelation, or discovery, which has been made of the condition of the Cairo lunatic asylum. The inmates were treated like wild beasts, and the fact that cholera raged among them had been concealed by gross lying on the part of the officials. A recent telegram states that Dr. Hunter has visited the asylum, and has ascertained that thirty-two deaths from cholera had occurred there in five days. It is not for us, who so recently kept, and made a show of, our madmen, to reproach the people of Egypt for their inhumanity, as manifested in cruelties practised on the insane; but they might at least be candid, and not try to hide their practices. The cold-water douche seems to be their only remedial agent. We can readily believe that it is when we remember our own cold bath and shower. They do not appear to have risen to the dignity of a revolving chair, a pit of fiery serpents, or any other of the many hideous products of European ingenuity devoted to the "treatment of the insane." It is not for us to blame, but rather to pity, and try to help the mad doctors of Egypt to a better state of enlightenment and more humane practice.

JUVENILE ACROBATS.

WE have no great sympathy with many of the more sentimental sorts of philanthropy which take the form of "grandmotherly government"; but it is impossible not to feel, with Lord Shaftesbury, that something—and something decisive—needs to be done to put a stop to certain of the practices carried on by the trainers of young children for acrobatic performances. The cruelties inflicted on those who are being prepared for exhibition as contortionists are terrible to think of, and must be horrible to endure. Public opinion is grievously at fault in respect to the exploits of stage acrobats of the younger sort. The ease with which they seem to perform the feats in which they are engaged blinds the spectator to the fact that, in acquiring the facility he admires, they have undergone fearful suffering. It is a grave question whether adults should be permitted to injure themselves for the public amusement; but there can be no question as to the impropriety of allowing parents or employers to torture young children with a view to make them minister to the delight of the multitude. A short Act of Parliament should be specially framed and quickly passed to prohibit the training of children for stage performances when either the process by which they are to be taught or the feats they are ultimately to perform involve pain or danger to limb or life.

"A TIMELY SURGICAL WARNING."

UNDER the above heading the *Morning Post* of Aug. 6th publishes a letter from Mr. Kenneth Cornish, Surgeon to the Royal Humane Society, in which the author thinks it is impossible to abstain from stigmatising Dr. Silvester's most extraordinary recommendation—to inflate a living being, whether dog or man, as an outrage on science and common sense and a danger to humanity. There is nothing novel in subcutaneous inflation for the purpose of removing skins from mammals, birds, &c.; it is the practice of most taxidermists, and an animal with the skin so inflated could float whether living or dead. "The surgical dangers of a subcutaneous inflation, even on a small scale, are so great and so transparent that to discuss them is to slay the slain," says Mr. Cornish. And no doubt he is right when he speaks of intravenous injection, the occurrence of which is always possible in the hands of the inexperienced when any attempt is made to produce artificial surgical emphysema. But the larger question, whether the subcutaneous inflation is dangerous and to what degree, is one which may fairly be discussed, and which could probably only be settled on the results of a series of experiments. It is certain that even large collections of surgical emphysema may be recovered from without any untoward consequence, and it is equally true that individuals have died apparently from no other sufficient cause. When there is great risk of death from drowning, are we justified in performing subcutaneous inflation? That is the question. For ordinary purposes, and in the absence of satisfactory data, we are inclined to fall in with the views expressed by Mr. Cornish; but the possibility, frequently very great, of death from drowning must be recognised as of an extraordinary nature. And then we have to deal with matters of greater and less probabilities, and of different degrees of danger.

THE ETHICS OF NOTIFICATION.

AFTER a paper on the Compulsory Notification of Disease by Professor Corfield, based chiefly on the working of the principle in eighteen towns, and in which it was maintained they worked well, Dr. Alfred Carpenter is reported to have said from the chair that in his opinion the duties of notifying the community of a case or cases of infectious disease was just as strong upon a doctor as that of telling the result of his diagnosis to his patient or his patient's friends. This is rather strong. We are believers in the principle of compulsory notification, not to the community, but to some recognised authority representing the community, and not by the medical officer, but by the householder. The discussion of the duty of notification is very opportune at the present moment. Suppose a sailor to be landed in Shadwell from a port where cholera rages and to be attacked with the symptoms of it in an unmistakable form, the medical attendant would obviously feel it to be his duty to advise the householder or the next most responsible person in the house to acquaint the sanitary authorities of the district with the fact. If he did not, and the excreta escaped in all

their infectiveness into the nearest drain, and the saturated linen was sent to the nearest laundry, the public censure of the medical man would be great and would be just. If medical officers of health would abandon the idea of making the doctor responsible for more than clearly informing the householder of the fact of his house being a centre of infection as soon as he himself is satisfied, the apparent discord between medical officers of health and men in active and laborious practice would cease.

OPIUM SMOKING.

A RECENT writer in the *China Review* brings forward some statements which tend to refute the notion that opium smoking is an injurious habit. It appears, says McCallum, the writer referred to, that in the general composition of opium, morphine, codeine, and narceine are the only bodies of any importance. Codeine and narceine give no sublimate; morphine cannot exist, even in infinitesimal quantities, in opium smoke which has passed through an opium pipe. The opium smoke does not possess the well-marked bitterness of morphine. Smokers prefer that variety of opium which contains a small percentage of morphine. So far as is known, no authentic case of acute poisoning from opium smoking has been recorded. During nearly a four years' residence in Hong Kong considerable attention was given to the subject, but not a single case of narcotism from indulgence in the opium pipe has been observed. We consider the last two statements extraordinary. Opium eating may be contrasted with opium smoking. The two habits may be combined or practised singly. Hence, difficulties of determination may arise. But we were certainly under the impression that authentic cases of injurious effects resulting from the use of the opium pipe alone were admitted on all hands, and were, in fact, notorious. It may not be authentic in Mr. McCallum's sense of the word, but we gave a brief account of some very marked symptoms, the result of opium smoking, in our impression last week. For our further views on the opium question, vide THE LANCET, vol. i., 1882, p. 233.

TRIAL OF LUNATICS BILL.

SOME misapprehension appears to prevail with respect to the force of this measure. It is not a project of lunacy law reform. Practically it involves nothing more than the giving of power to a jury to return a special verdict of insanity as an excuse for any act done or omission made by a lunatic, instead of acquitting the person charged on the ground of insanity. The Act will have no effect whatever except to simplify the legal process of disposing of a well recognised set of cases. It adds nothing to the security of the sane or the protection of the insane. Except to the lawyers concerned it makes no sort of difference whether a person charged with an offence be acquitted on the ground of insanity or convicted with the excuse that he is not punishable because insane.

DANGER ON THE BRIDGES.

WILL some member of Parliament ask the Home Secretary —*not* the chairman of the Metropolitan Board or any representative of the City—if he is aware that the iron parapet wall or railing of Blackfriars bridge, which is the only protection to foot passengers, reaches no higher than the hip of an ordinary man, and that the footpath is actually raised immediately under the parapet as though to increase the danger? A half-drunken man standing from five feet ten inches to six feet could scarcely avoid falling over if he lurched only slightly in crossing the bridge close to the parapet. Other bridges are very nearly in the same condition as regards the height of the parapets, but Blackfriars is particularly perilous, especially on the east side, on account of the rise given to the footpaths. The wall should have been a foot higher. It is, doubtless, too late to repair the effects of this constructional blunder, but it is possibly not too late to make a little gutter close to the parapet, so that foot passengers may be kept away from the side, and at the same time to give *relative* height to the wall. As matters now stand these bridges are simply death-traps, particularly the one we have mentioned.

SEATS FOR SHOPWOMEN.

DESIGNS for seats for shopwomen, so devised as not to take up much space when out of use, and to be always at hand, have been brought under our notice. We have done our utmost to promote the movement in aid of young women employed in shops. We have pointed out the manner and extent of the sufferings to which they are subjected, and the permanent injuries which are done to them by long standing. We have, further, succeeded in enlisting the sympathy of many of the largest employers of labour in the provision and use of seats; but little or nothing can be practically accomplished, simply because the women who sit on one side of the counter buying goods do not in their hearts like to see those who serve them also seated. Shop-walkers cannot endure to see the young persons under their control seated. They are supposed to be idle when thus resting. Until public opinion is educated up to the level of a common-sense view of this question, and shopkeepers perceive that it is so educated—in other words, until the prejudice against sitting during business hours is removed—it is useless designing seats or even providing them. This is clearly one of the many drawbacks of a high civilisation which have, for the time at least, to be endured.

HEALTH OF WATERING-PLACES.

THE Registrar-General in his last quarterly return, just issued, publishes his usual table giving mortality statistics for forty-six English watering-places and health resorts, relating to the three months ending June last. The average annual death-rate from all causes in these holiday resorts was 17·9 per 1000, against 20·1 in the whole of England and Wales; while the rate from zymotic diseases did not exceed 1·28, the general English rate being 1·89. These figures imply assurance of the generally satisfactory sanitary condition of these watering-places. The table affords the means of estimating the health condition of these small towns individually, especially as regards the freedom from, or the prevalence of, zymotic disease. While, however, the period embraced by the statistics is too small to give the several rates much value for comparative purposes, it may also be borne in mind that a high zymotic death-rate due to the epidemic prevalence of whooping-cough, for instance in April or May, need not cause alarm in August, although it might prompt local inquiry as to the termination of the epidemic.

CHLORIDE OF LEAD AS A DISINFECTANT.

CHLORIDE OF LEAD is now proposed as "a new disinfectant." It was suggested by the late Dr. Goolden in these columns many years ago. Half a drachm of nitrate of lead is dissolved in a little hot water and mixed with a slight excess, say two drachms, of common salt in a pail of water. The clear liquid, consisting, of course, of chloride of lead, is, no doubt, an excellent disinfectant, but we do not see that it is better in any respect than chloride of zinc, which is very much cheaper. These metallic disinfectants have the advantage of being powerful deodorisers as well as germ killers. Each will absorb sulphuretted hydrogen and ammonia, to take two typical gases, and yet neither

has any smell of its own. Carbolic acid, a most valuable antiseptic, does not destroy, but only masks foul smells and leaves its own disagreeable and persistent odour in addition. Lead salts, besides being expensive, are blackened by sulphuretted hydrogen, which is a disadvantage. The only objections to chloride of zinc are that, being non-volatile, it does not purify air, and that having no odour there is constant danger of its being taken internally by mistake. This objection applies, of course, equally to chloride of lead.

PUBLIC HEALTH AND LUNACY IN SCOTLAND.

THESE subjects, recently discussed in THE LANCET, have since shown some signs of awakening Parliamentary interest, and it may be profitable to note how the wind blows in that quarter. Mr. Webster asserted that the Lunacy Board for Scotland is extravagantly conducted, and deserves only to occupy a subordinate position in the Board of Supervision, which already has extensive medical functions. The defence of the Lunacy Board was cordial and complete on the part of several other members, and we trust the quietus has been now given to what threatened to be a dangerous agitation, under the specious plea of economy. It is made more clear than ever that Scotch lunacy is efficiently, economically, and considerately managed, whilst we know that commissioners and superintendents there are the pioneers in the modern treatment of the insane. It is quite otherwise with the conduct of public health matters in Scotland; and it is noteworthy that no Scotch member of Parliament was found to defend the system against the rather sweeping assertion of Mr. Sclater-Booth that nothing worthy of the name of sanitary administration exists in Scotland. Anyone who is acquainted with the constitution of the Board of Supervision—really a Poor-law board—upon which neither medicine nor science finds a place, will at once feel how incompetent such a body must be for the administration of a Public Health Act; and it says something for the common sense of the members that they have been able to conduct a business so far removed from their proper work without even greater scandal. When inquiries are instituted in Edinburgh by the president of the proposed Local Government Board, we do not doubt that a strong addition to the scientific side of the Board of Supervision will be deemed a simple necessity.

MEDICAL HONOURS FOR IRELAND.

THERE was one incompleteness in Mr. Gladstone's reply to Mr. King-Harman on the question of the differences between the honours accorded to members of the profession in London and in Dublin. He alleged, in support of the course taken in Ireland, that it had not been done without consultation with the most important members of the medical and surgical professions. He did not say whether he had taken into account Irish medical opinion. He said, with much force and happiness, that the profession was one and not three; but this is a social and national question on which we are sure Mr. Gladstone will see the reasonableness of consulting national authorities.

CARDIAC ECTOPIA.

CONSIDERABLE interest was manifested at a recent *séance* of the Académie de Médecine by the exhibition of a case of pregnancy at the ninth month, by M. Tarnier. The woman was a secundipara, and the sternum was bifurcated at the lower part, so that the beats of the heart were seen to take place immediately beneath the skin of the epigastric region. It was stated that the ventricular part of the heart could be seized between the fingers; by palpation over the upper part of the notch the contractions of the auricles could be detected. Apparently the diaphragm does not exist at the site in question. M. Marey said that this specimen of teratology would no doubt permit a verification in man of observations made upon the heart of animals. M. Beau had explained the beat of the heart as due to the dilatation under the influence of the afflux of blood at the time of the ventricular systole. According to him the apex of the heart contracts during the diastole. In the case of ectopia, on the contrary, it was easy to perceive that the ventricle was soft during the diastole, and hard during the systole; in the latter period the apex of the heart strikes the thoracic wall.

THE AIR CURE OF CONSUMPTION.

IT is now some years ago since Dr. Henry Mac Cormac promulgated the theory that the *vera causâ* of phthisis was the respiration of prebreathed air. According to this view a healthy man constantly exposed to an impure atmosphere, rendered so by his own breathing or that of other individuals, is physically certain to become tubercular. Such a notion has been entertained by many high authorities, but, so far as we know, always rejected after due consideration. The infectiousness of phthisis is denied by Dr. Mac Cormac. He regards the experiments and investigations of Koch as completely overthrown by the researches of many pathologists, but more especially by those of Spina. The pamphlet, entitled "The Air Cure of Tubercular Consumption, as conducted at Davos and the Engadine," is addressed in the form of a letter to the "Medico-Chirurgical." We interpret this to mean the Royal Society of that name. It is evident that the pamphlet has been written by Dr. Mac Cormac in an excited and unhappy frame of mind.

ZYMOTIC DISEASE IN BIRMINGHAM.

BIRMINGHAM is just now not only suffering from the epidemic prevalence of scarlet fever, but also from an outbreak of small-pox. During the five weeks ending last Saturday forty-eight deaths from scarlet fever and nine from small-pox were registered within the borough. At a meeting of the Town Council on Tuesday last it was reported that during the preceding fourteen days forty-six new cases of scarlet fever and fifty-six of small-pox had been reported, and that in the Borough Hospital ninety-five cases of scarlet fever and seventy-eight of small-pox were under treatment. So large a number of cases of small-pox has not occurred in the town since the epidemic of 1875. At a special meeting of the Health Committee it was decided to spend £4000 upon the immediate erection of two additional wards to meet the increasing demands upon the hospital. It is satisfactory to know that the value and utility of hospitals for infectious diseases are now more fully recognised by sanitary authorities and by those for whose use they are mainly intended.

THE NATIVE GUANO COMPANY.

IN the House of Lords last Monday Lord Forbes, commenting on the present disgusting and shameful pollution of the Thames with sewage, alluded to the A B C system of purification now on show at the Fisheries Exhibition. No one who has been to the works at Aylesbury doubts that the precipitation process of the Native Guano Company is efficient. It gives an excellent effluent water, which would improve, rather than injure, any tidal river. Our only doubts are as to the cost of the system, and the possibility of obtaining the materials in sufficiently large quantities. The Native Guano Company have carried on their works at Aylesbury for a long time, and we shall be glad to hear that they are in a position to afford definite information on these important points. If the sewage of London were purified by the A B C method what general rate would cover the cost? The metropolis could afford a good round sum,

and it would be a great thing to save even a portion of the phosphates which at present, under a system properly characterised by Liebig as a national crime, are thrown into the sea.

THE REJECTIONS IN MIDWIFERY AT THE ENGLISH COLLEGES.

IT is understood that the rock on which many students came to grief in the recent examinations of the two English Royal Colleges was that of midwifery. The proportion of failures in this subject at the College of Surgeons was very great, probably not less than thirty to thirty-five out of ninety-four candidates. The College of Surgeons cannot better atone for its omissions in the past than by fixing a high standard of midwifery qualification. If it is thought that low midwifery faculties will do for the poor they have them abundantly in the existing class of midwives. But the kindest thing for medical practitioners is to compel them to learn midwifery well and practically before giving them a qualification. Midwifery is a duty that cannot be evaded, and which in many districts cannot be shared. It is almost certain that if direct representatives of the profession had had any voice in matters of medical education, far more attention would have been given to this subject in medical curricula and in medical schools. Let us be thankful, however, for indications that it is now to be duly regarded, and thankful not least to the College of Surgeons for raising the subject into the first rank of consequence.

RURAL SANITARY DISTRICT OF THE GUILDFORD UNION.

MR. JOSEPH SMITH has recently resigned his appointment as Medical Officer of Health for this district, and the Rural Authority will shortly have to fill up the vacancy. It is, in our opinion, very desirable that his successor should be a gentleman who is not engaged in private practice; and we doubt whether, on the whole, the Authority could do better for their district than by joining the Surrey Combined District, the officer of which (Mr. E. L. Jacob), has, we believe, discharged his duties for several years to the satisfaction of the constituent authorities.

FACTS ABOUT VACCINATION.

AN authorised edition of the recent speeches in Parliament by Sir Lyon Playfair, K.C.B., and Sir Charles Dilke on Mr. P. A. Taylor's motion as to the inexpediency of enforcing vaccination, has been issued by Messrs. Jarrold and Sons of Paternoster-buildings, in the form of one of the "Jarrold's Household Tracts." These speeches so fully convinced the House of Commons of the fallacies circulated by the anti-vaccinationists as to lead to an overwhelming majority in favour of retaining the protection afforded by vaccination as a compulsory measure; and the complete text, in the cheap form in which it is now issued, deserves a wide circulation.

PROVIDENT MEDICAL SOCIETIES.

IT has been determined to form a society at Preston, similar to and having the same rules as the West Riding Medical Charity, with power to admit gentlemen practising in North Lancashire, Westmoreland, and Cumberland. The honorary secretary is Mr. John Holden of Preston. There should be a dozen such societies in Great Britain. We might then hope to hear no more of these painful appeals to charity, which often discredit the forethought and providence of the profession. All should join, including those who are rich for the pleasure of helping those who are poor.

THE Società Italiana di Chirurgia, founded by the Senator Palasciano, offers a gold medal (value £20) for the best memoir on "The Neutrality of the Wounded in War, and on the Extension of those means of aiding them adopted during the last twenty-five years, embodying rules and suggestions for turning the same to the best account in future." Competitors are recommended to give an authentic history of the Geneva Convention (1864), and of its revision in 1868, showing the respective contributions of medical science, of philanthropists, and of Governments to this movement of modern civilisation; 2ndly, to enumerate the difficulties foreseen and encountered in the application of the new international compact, as well during the Franco-German as during the Russo-Turkish wars; 3rdly, to estimate the quality and the effects of the increase in aids to the wounded during all the wars waged in Europe, Africa, and America from 1859 to 1883, with a valuation of international assistance; 4thly, to propose amendments and measures indispensable to the adequate execution of the aims of the Convention; 5thly and finally, to indicate the mode of securing the necessary augmentation of relief to the wounded by utilising to the best advantage the charity of communities. The competitor may write in Latin, French or Italian, and his memoir must be distinguished by a motto, and accompanied by a sealed envelope containing his name and address. Competing memoirs must be sent in not later than Jan. 31st, 1884, to the Secretary-General of the Società Italiana di Chirurgia, Rome, who may be applied to for further information.

THE twelve English doctors sent out to Egypt (says *The Times'* correspondent) have been stationed as follows:—Drs. Wyborn and Wilkins at Alexandria, Dr. Harman at Mehallet, Dr. Porter at Rosetta, Drs. Macnally and Taylor at Zagazig, Dr. Thrupp at Damanhour, Dr. Gulliver at Boulak, Dr. Crookshank with the gendarmerie cholera camp (probably near Kafrdawar), Dr. Acland with the Egyptian army at Abbassieh, Dr. Leslie at Cairo, having charge of the correspondence, and Mr. Cantlie at Kafrzayat.

WE have received a copy of the *Pall Mall Gazette* "extra," containing a good deal of information on the means of preventing an outbreak of cholera. A history of the scourge is given, along with official directions as to the removal of local pollution, and other matters of importance. A useful map is included, setting forth the incidence of the disease in the various towns of England and Wales, with the numbers of its victims, in the outbreaks of 1849, 1854, and 1866 respectively.

A CURIOUS case was brought recently before the Superior Court of Maryland, U.S.A., in which a rejected candidate at the examination of the College of Physicians and Surgeons of Baltimore petitioned the Court to issue a writ of *mandamus* upon the Faculty that they should issue to him their diploma. The Faculty filed a demurrer, which was allowed, but an appeal was granted.

THE *Journal de Médecine de Bordeaux* has just entered on the thirteenth year of its existence. From the number of times that we have had occasion to draw attention to some of its original articles, our readers will gather that we entertain a good opinion of the scientific work of this provincial French journal.

IN compliance with a desire expressed by the Egyptian Government, the Indian Government has decided upon sending seven doctors and forty hospital assistants to Egypt, there to give help during the prevalence of cholera. It is expected that they will start on the 14th instant.

A FATAL accident has, we regret to learn, befallen Mr. Anderson, Surgeon to H.M.S. *Stork*. During a sporting trip up the Mayumba river a hippopotamus was wounded. The infuriated animal charged the boat, which was capsized, and three out of its four occupants, including the surgeon, were drowned. Mr. Anderson was making his first voyage as a naval surgeon.

THE Noel Park Estate, the third of its kind, was opened by Lord Shaftesbury on the 4th inst. The success of the former experiments affords a good augury for the present enterprise, and is a hopeful sign of the increasing estimation in which healthful surroundings are held by the less instructed portion of the community.

WE learn from the *France Médicale* that the Municipal Council of Paris has resolved on the institution of a service of public help and urban ambulances, on the principles of those which are in use in New York and London.

ARRANGEMENTS have been made for the introduction of the cinchona into Guatemala, the soil of which is thought to be favourable to the cultivation of the trees.

THE BRITISH MEDICAL ASSOCIATION.

FIFTY-FIRST ANNUAL MEETING,

Held at Liverpool, August, 1883.

THE ANNUAL MUSEUM.

THIS museum was made up of four chief departments. In the drug and instrument section there was a perfect *embarras de richesses*. Having entered at the left hand we were confronted by the profuse display of Messrs. Burroughs, Wellcome, and Co. Here were to be seen compressed tablets of many preparations, some of them quite new, capsules of quinine and ergotin, and many other drugs, coated either to conceal the bitter taste, or for purposes of preservation. The gelatine coatings dissolve in the saliva after a few moments' retention in the mouth. Phosphorus preparations are undoubtedly well kept by this impervious but soluble coating. Many preparations of malt extract form a prominent feature of the museum. We have already expressed our opinion of some of these—e.g., Loeflund and Co.'s pure hordeum diastase malt extract. The new drugs jequirity and Jamaica dogwood, of both of which a liquid extract is prepared, were exhibited by Messrs. Sumner and Co. of Liverpool. Various stages in the spontaneous fermentation of koumiss were on view and taste at the stall of the Aylesbury Dairy Company. In the sanitary section many beds for invalids were exhibited, some possessing a winding rack and adjustable head-rest. Grove's self-acting sick bed was also shown in working order. Models of many ventilators, constructed on Boyle's principle by Messrs. Gibbs, also formed part of the exhibition. In the sheds built outside the College there were a number of ambulance waggons for town and hospital use. The Pathological Museum was well filled with many prize specimens illustrating various forms of morbid changes. These had been collected and arranged by Drs. Paul, Briggs, and Mott, at the expense of much time and labour. Dr. Byrom Bramwell exhibited a large number of microscopical sections of various changes met with in the spinal cord; these specimens were models of their kind. Not the least praiseworthy collection of micro-photographs, the best we have ever seen, was that put on view in a separate room by Dr. Richard Norris. An effective representation was afforded by these photographs of the new morphological element of the blood, which Dr. Norris believes to be the antecedent of the red blood disc, and to play an important part in the formation of fibrin in the coagulation of the blood.

PATHOLOGY.

This section was very thinly attended on Thursday. Dr. Silcock read an interesting paper on some points connected with the Repair of Fractures, in which he considered that there was a close relation between mobility, want of support, and the production of a callus largely composed of cartilaginous tissue. It seemed that where strength and toughness were required nature produced an abundant callus in which cartilage played a prominent part. Hyaline cartilage had been found by Dr. Silcock covering the ends of an ununited fracture. Mr. Symonds had also discovered cartilage in a fracture of the neck of the femur of a female aged seventy-eight years, and also in new bone developed as the result of a periostitis. He regarded it as a stage in the formation of permanent bone. Dr. Paul gave a complete and learned account of primary growths of the kidney, bladder, and prostate. His classification was illustrated by printed diagrams. Dr. Joseph Coats and Mr. Symonds participated in the discussion.

MICROSCOPIC SPECIMENS.

Perhaps the most conspicuous and most interesting part of the display at the whole meeting was the large exhibition of microscopic slides. Needless to say, the specimens of various micro-organisms were prominently recognised; and Drs. Barron and Mott deserve praise and thanks for the care which they bestowed on this section, as well as for the excellent coloured diagram illustrating the chief varieties of microcytes, chaplets of micrococci from an acute abscess, micrococcal plugs in hepatic capillaries and necrosis of liver cells, lymph spaces plugged with zooglœa masses in erysipelas, section of small-pox pustule, bacilli from spreading gangrene, typhoid, anthrax, tubercle, leprosy, and spirillum from cod's head infusion, very like that of relapsing fever (Spirochæta Obermeyerii).

MEDICINE.

A very large number of members and one lady were present at the discussion on "The Causes and Consequences of Abnormal Tension in the Arteries," which was opened by Dr. Broadbent in an exhaustive manner. Excessive cardiac action, plethora, and peripheral resistance in the circulation were first described. Although Dr. Broadbent was not inclined to deny the great part which the arterioles played in the economy, he yet considered that the chief seat of resistance was to be found in the capillaries. This might be due to changes in the tissues or in the blood, or possibly in both under different circumstances. In asphyxia he thought the resistance was due to the alteration in the state of the blood, and probably also in cases of dropsy. He considered it possible that the accentuated pulmonary second sound might be due to resistance originating in the pulmonary capillaries in some cases, and thought that the notion that overloading of the right heart was always due to obstruction at the mitral orifice was too exclusive. The view that chronic arterial obstruction was the result of a blood alteration tended to receive some support from the fact that this condition might be removed with extreme readiness. In such cases it was reasonable to suppose that there was a toxæmia, the result of imperfect oxidation of the nitrogenous matters. An objection was put forward to the term "renal pulse." In renal affections the absence of arterial tension was an unfavourable prognostic sign. Acute, chronic, and so-called suppressed gout were generally associated with high arterial tension. Long residence on the part of Europeans in hot climates, lead poisoning, chlorosis, chronic bronchitis and emphysema, mitral stenosis, inherited tendency and constipation, were all enumerated as playing a part in the etiology of high arterial tension. Valvulitis, arterial degeneration, various conditions of the heart of transient or lasting sort, cerebral hæmorrhage, convulsions, and symptoms of cerebral softening were amongst the consequences depicted by Dr. Broadbent as resulting from abnormal blood-pressure. Dr. Milner Fothergill repeated his well-known views on the gouty heart and other associations of high arterial tension. Dr. Eddison spoke of the swing of the pendulum as illustrating the change in views in relation to the pathology of arterial tension and arterio-capillary fibrosis which were now being advocated. Dr. S. C. Smith made some remarks which received Dr. Broadbent's entire assent. Dr. Saundby thought the characters of the urine in chronic Bright's disease were difficult to explain on the notion of a universal arteriole contraction. Dr. Mahomed inferred that the delay took place in the capillaries because the corpuscles

had certain functions to discharge for the neighbouring tissues, but were unable to carry this out properly, and so tarried in their slow or futile attempts; it was this alteration in the relation between blood elements and tissues that gave rise to the enormous peripheral resistance. The respective values of palpation and the sphygmograph in the estimation of the pulse indicative of high tension were well explained. Dr. McVail (Glasgow) developed the notion, that the elastic tissues of the arteries and of the pulmonary tissue were intimately related. A physiological emphysema might be said to start from birth and go on with increasing age, and just in an analogous fashion a degeneration occurred in the large arteries, whose importance ought not to be overlooked in this question of high arterial tension. Drs. Sansom, Glynn, and Byrom Bramwell also gave the results of their experience on the subject. In his reply, Dr. Broadbent said he could not agree with the view expressed by Dr. Fothergill, that there was always an abundant excretion of urine of low specific gravity in cases of high arterial tension. He had passed through the stage at which one was inclined, as Dr. Bramwell was, to think that arteriole contraction played the largest share in the production of the peripheral resistance. Dr. Austin Flint then read his paper and advocated the employment of early tapping in cases of ascites. Early and repeated tapping had been accused of producing prostration, peritonitis, and exhaustion, but Dr. Flint's experience led him to confirm the utility of the procedure.

On Friday, after the reading of the address on Pathology, Dr. Stephen Mackenzie proceeded to open the discussion on Purpura in the section of Medicine. The parts played by the blood, the bloodvessels, and the nervous system in the production of purpura were taken successively into consideration. Broad and wide were the conceptions which Dr. Mackenzie evolved in discussing the nature of these phenomena. Microscopical and chemical changes which had been described in these conditions were enumerated. Vascular changes, such as degenerations, nodular periarteritis, waxy degeneration (Wilson Fox), and other alterations were mentioned as having been found in different circumstances. Embolism due to leucocytes, plugs of micrococci, fat and other substances, may give rise to purpuric eruptions. The association of retinal hæmorrhages with purpura hæmorrhagica, scurvy, hæmophilia, and idiopathic anæmia was touched upon. Dr. Balthazar Foster related some interesting cases of Purpura, in one of which a female, after a brief exposure to snowy coldness, was seized with nervous symptoms, of which epileptiform spasm was the most notable, soon followed by an abundant crop of purpuric spots all over the cutaneous surface. Death ensued within a week. Probably in this case one had to do with disordered action of the vaso-motor system. Mr. Malcolm Morris and others took part in the discussion.

DISEASES OF CHILDREN.

Dr. R. G. Morison followed Dr. Ballard with a paper on Infantile Diarrhœa and its treatment. A discussion ensued.

In the afternoon Mr. Morrant Baker entered on a discussion of Acute Epiphysial Necrosis and its consequences. He said that cases did occur after the first year of life, although Mr. Thomas Smith had not met with such. The frequency of the affection and the value of early incision were advocated. The pus so frequently followed the course of the periosteum that the real source of the disease was not diagnosed in many cases. Hip-joint disease might frequently commence as acute epiphysial necrosis. He raised the question as to the treatment of the associated arthritic disease. Mr. John H. Morgan related the case of a boy who had been under his observation for more than three years, and had suffered from necrosis of the upper epiphysis of the right humerus consequent upon injury. Suppuration had continued for three years, and some dead bone had been removed on two occasions. At the end of a year and a half after the commencement of disease, the affected bone was observed to be one inch shorter than its fellow. Little or no growth took place for a year and a half, at the end of which time the sinus closed. It was then found that there existed a difference of two inches in length between the sound and the affected bone; but since that time both bones have continued to grow at an equal rate and the difference has been maintained. Casts were exhibited which showed the difference to be only one of length; there was no muscular wasting, and the movements of the joint were not impaired.

Mr. G. A. Wright then communicated his paper on the Value of Localising the Primary Lesion in Joint Disease as an indication of Treatment. In many cases of synovitis he had been enabled to secure a mobile joint, although much of the diseased synovial membrane had been removed. In the discussion which ensued, Mr. R. W. Parker pointed out the frequency with which he had met necrosis of the upper epiphysis of the femur in cases of excision of the hip-joint. Mr. J. H. Morgan referred to the differences which must be recognised in different joints, and spoke of the relation between epiphysial and joint disease.

Dr. H. G. Rawdon then read his paper on the Operation for Hare-lip. Messrs. Morgan and Parker also joined in this discussion.

On Friday the proceedings opened with the reading of Dr. Gee's short but valuable paper on Some Kinds of Albuminous and Purulent Urine in Children. The importance of testing the urine of infants was abundantly illustrated by appropriate cases. Symptoms of high pyrexia, marked drowsiness, &c., might sometimes be found to be associated with pus or albumen in the urine indicative of nephritis or inflammation in the course of the urinary tract. Unless the urine were collected and tested in some cases of apparently obscure illness, owing to the want of local complaint, the nature of the malady might be easily overlooked. A nurse who observes and speaks of unusual states of the napkin will prove of much service under such circumstances.

Dr. J. S. Bury, of Manchester, then read a suggestive and important paper on Osteomalacia in a child, aged seven months. Good macroscopic and microscopic specimens illustrated his remarks. Briefly, the case was one of general softening of the bony tissue without a trace of proliferation of the zone of cartilage which intervenes between the shaft and the epiphysis. Questions as to the proper definition, alliances, and consequent nature of rickets and osteomalacia were raised. The observations of Rehn and von Recklinghausen were incorporated (for an outline of which see THE LANCET, vol. i., p. 240, of the present year). Mr. R. W. Parker, Dr. Ashby, and others also spoke on the subject.

OPHTHALMOLOGY.

The business of this section was well sustained to the last. Mr. Teale opened the debate on the treatment of Ulcers of the Cornea, with especial reference to incision and scraping. Mr. C. Higgens advocated the treatment of corneal ulcers by warmth and eserine. Mr. C. Shears contributed a careful tabular analysis of forty cases of tobacco amblyopia drawn up at the suggestion of Mr. Jonathan Hutchinson. The name and age, the duration of amblyopia, the state of the vision when first seen, habits as to tobacco before and after the commencement of treatment, subsequent vision, ophthalmoscopic changes, treatment and state of health, were recorded in this neat summary.

ANATOMY AND PHYSIOLOGY.

The remainder of this session was devoted to the exhibition of apparatus and specimens. Dr. George Hoggan showed his microscopic preparations, illustrating the genesis and comparative anatomy of the nerve terminations in the skin and hairs. Dr. E. H. Jacob brought forward microphotographs of the embryos of the chick. The embryology of the short muscles of the human hand was illustrated by preparations made by Mr. B. C. A. Windle. Dr. Francis Warner gave a demonstration of his now well-known apparatus for obtaining graphic records of the movements of the fingers, hands, &c. Dr. Cathcart's new form of ether freezing microtome with parallel glass bars and zinc resting plate, made by Fraser of Edinburgh, was seen in action. Mr. Sibley exhibited a good series of embryos illustrating the development of the chick.

PUBLIC MEDICINE.

In this section the proceedings commenced on Wednesday, the 1st inst., with three papers on the Etiology of Diphtheria, by Dr. Alford (Taunton), Dr. Alfred Carpenter (Croydon), and Dr. Willoughby (London) respectively. A discussion followed in which the President, Mr. T. P. Teale, of Leeds, and others took part. This was followed by a paper of which Mr. Makuna (London) was the author, on Autumnal Diarrhœa, with chief regard to the meteorological conditions which favour or retard its prevalence. Next came a paper by Mr. T. M. Dolan (Halifax), entitled "A Scheme for the more Comprehensive Study and Prevention of the so-called Zymotic Diseases." The last subject of the day's proceedings was "Injuries to Health associated with our Present System of Elementary Education," by Professor Snellen

(Utrecht) and Mr. Johnson Martin (Bolton). A discussion followed in which the President, Dr. Vacher (Birkenhead), Dr. Glazebrook (West Derby), Dr. Goldie (Leeds), Dr. Millican, Dr. Eddison (Leeds), and others took part.

On Thursday the 2nd inst., the proceedings commenced with a paper by Mr. Ernest Hart on "The Necessity for the More Stringent Regulation and Registration of Plumbers." He instanced the flagrant case of the new Local Government Board Offices, in which pools of sewage were found in the basement, where there was no effectual outflow into the sewers, and where even now it was stated, with truth, that sewer gas was laid on as effectually as coal gas. Dr. Carter (Liverpool) followed with a paper, entitled "Directions in which Sanitary Laws might be advantageously Amended or Extended." This was followed by Mr. Fred. W. Lowndes (Liverpool) who, in a paper on "How to make our own Houses Healthy, with personal experiences," detailed the state of the three houses in which he had lived, and strongly advised all his younger brethren before taking a house to ascertain for themselves that it was in a perfect sanitary condition, and if not, to make it so. In the discussion which followed these three papers, the President remarked that it was his invariable practice now before taking a house for his summer or autumn holiday to examine it thoroughly beforehand to see if it was in all respects healthy. Dr. Carroll (New York) stated that it was necessary in New York, where the cold was so intense at times, to have the soil-pipe inside the house, but that with care it could be made perfectly air tight. Dr. Nunn (Bournemouth), Dr. Thudichum (London), Dr. Goldie, and others, took part in the discussion.

At the afternoon meeting, Captain Douglas Galton, C.B., read a most valuable paper on Hospital Construction, for which he was, on the motion of the chairman, accorded a hearty vote of thanks by the meeting. Dr. Beverley (Norwich) took part in the discussion. Dr. Imlach (Liverpool) read a paper on quarantine. A discussion followed in which Drs. C. R. Drysdale, Fritzpatrick, Stocker, and Irwin took part. At Friday's meeting papers were read by Drs. Goldie and Ewing Whittle (Liverpool) on the disposal of town refuse. The general opinion appeared to be that vegetable matter should be burnt, and that ashes containing vegetable refuse should be emptied frequently. In the discussion which followed, the chairman, Mr. J. B. Smith, chairman of the Liverpool Health Committee, Drs. C. R. Drysdale, Jacob (Dublin), Fitzpatrick, Glazebrook (West Derby), Thudichum, Nunn, T. Eyton Jones (Wrexham), Ebenezer Davies (Swansea), and others took part. Some papers were not read owing to the absence of the authors, and others had to be taken as read.

LAST GENERAL MEETING.

The reports of the Medical Reform Committee, of the Parliamentary Bills Committee, of the Scientific Grants Committee (including the proposal for the establishment of scholarships for research), of the Habitual Drunkards Committee (approving the establishment of the new basis of voluntary treatment) and of the Dalrymple Home for Inebriates, were each received and adopted. Dr. MacCormac's resolution, "That the Association views with regret the long delay in the redress of the grievances of the Militia surgeons of the United Kingdom" was carried *nem. con.*

After numerous votes of thanks to the chairman of the local committee, to the Mayor and Corporation, to Dr. Waters, the President, and others who had assisted in the entertainment of the members, the meeting stood adjourned till the 17th instant, at Exeter Hall, London. In the evening the Mayor of Liverpool and Mrs. Radcliffe gave a brilliant reception at the Town Hall. Saturday was devoted to the enjoyment of excursions to Llandudno, Chester, and other places of interest in the neighbourhood.

THE BISHOP OF LIVERPOOL AND THE MEDICAL PROFESSION.

AT the service in the Pro-Cathedral Church of St. Peter, on the 1st inst., held in connexion with the meeting of the British Medical Association, the Bishop of Liverpool took for his text the words "Luke the beloved physician." He said: It is a significant fact that the great Apostle of the Gentiles, who was ever ministering to men's souls, makes honourable mention of one who ministers to men's bodies. I remark then, for one thing, that one great phenomenon of the Christian religion is the dignity and importance which it attaches to the human body. But the importance which Christianity attaches to the body is not one whit greater than that which is continually attached to it by the children of this world. It is easy to sneer at the simple facts and doctrines of Christianity, and to talk great swelling words about "mind," and "thought," and "intellect," and "reason." But there is no getting over the broad fact that it is the body and not the mind, and the wants of the body, which govern the world. Statesmen and politicians know this full well, and often to their cost. Their tenure of office depends in great measure on the contentment of the people. And who does not know that nothing creates popular discontent so much as high prices of corn, and general dearness of food for the body? To promote cleanliness and temperance and social purity, to aim at the highest standard of sanitary arrangements, to encourage every movement which can increase the health and longevity of a people, to provide as far as possible good air, good water, good dwellings, and cheap food for every man, woman, and child in the land—these are objects which deserve the best attention both of the Christian and the man of the world. Another remark which I wish to make is this. Observe the honour which our Lord Jesus Christ has put on the medical profession. It is a noteworthy fact, to begin with, that one of the four men whom our Lord chose to write the Gospels was a "physician." Not only does ecclesiastical history, with almost entire harmony, tell us this, but there is strong internal evidence in St. Luke's writings to confirm it. An ingenious writer has lately published a book which proves that many Greek phrases and expressions used in the third Gospel and the Acts are thoroughly medical, and such as a physician of that age would use in describing the symptoms of disease or of returning health. In short, there is little room for doubt that out of the twenty-seven books which make up the little volume of the New Testament, two of the longest come from the pen of a medical man. But, after all, there is another fact of even deeper significance which demands attention. I refer to the very large number of cases of sickness and disease which our Lord was pleased to heal during the period of His earthly ministry. The great majority of His wondrous works were works of mercy wrought on the suffering bodies of men and women. Why did our Lord adopt this line of action, and habitually condescend to devote time and attention to the humbling and often loathsome ills to which flesh is heir? Partly, I believe, to remind us that He came to remedy the fall of man; and that of all the consequences of the fall none cause so much trouble and affect all ranks and classes of society so thoroughly as sickness. But partly also, I believe, to teach Christians in every age that to minister to the sick is evidently a work of mercy according to Christ's mind. He that endeavours to check disease, to alleviate suffering, to lessen pain, to help the self-curative powers of nature, and to lengthen life, may surely take comfort in the thought that, however much he may fail, he is at any rate walking in the footsteps of Jesus of Nazareth. Next to the office of him who ministers to men's souls there is none really more useful and honourable than that of him who ministers to the soul's frail tabernacle, the body. He that thinks of these things will not wonder that the rise and progress of Christianity have done much for the office of the physician. That nothing was known of medicine or of surgery before the Christian era it would be unfair to say. The names of Podalirius and Machaon in Homer, the better-known, less mythical name of Hippocrates, are familiar to students. But it is a certain fact that the sick were never so systematically cared for, and the medical profession so honourably esteemed, as they have been since the Church of Christ leavened the world. The builders of the Parthenon and Coliseum built no infirmaries. You will find no ruins of hospitals at Athens or Rome. The infidel, the sceptic, and the agnostic may sneer at Bible religion if they please, but they cannot get over the fact that medical and surgical knowledge have always advanced side by side with the Gospel of Christ. Few of us, perhaps, realise the debt we owe in Christian England to the medical profession. How much the comfort of our lives depends on it, and how vastly different is the condition of those whose lot is cast in

a heathen country, or an uncivilised back settlement of a colony! He that has a good servant in his house, and a good doctor within reach, ought to be a thankful man. Fewer still, I believe, realise what enormous strides medicine and surgery have made in the last two centuries, and are continually making in the present. Of course death still reigns, and will reign until Christ returns in glory. Kings and their subjects, rich and poor, all alike die, and will die until death is swallowed up in victory. And no marvel! The human body is a frail and delicate machine. "Strange that a harp of thousand strings should keep in tune so long." But that the duration of life in this age is greatly increased by the advance of medical science, and that many diseases are preventable, manageable, or curable, which were once always thought fatal, are facts entirely beyond dispute. Let anyone read old Baxter's semi-medical sermon in the "Morning Exercises," and observe his receipts for hypochondria and dyspepsia, and then say whether he ought not to be thankful that he lives in the nineteenth century. The mere fact that our ancestors knew nothing of quinine, chloroform, vaccination, the stethoscope, the ophthalmoscope, the laryngoscope, or the carbolic spray, is a fact that speaks volumes to any intelligent mind. None, perhaps, have such constant opportunities of seeing the value of a medical man's services as Christian ministers. We meet you in sick rooms, and by the side of death beds, and we know the self-denying labour which your profession entails, and the ungrudging and often unpaid attention which the sick almost invariably receive at your hands. There ought always to be the utmost harmony and friendly feeling between the two professions. The sick room is the common ground on which we meet. On that ground we can greatly help one another. I think we can help you by teaching your patients the paramount importance of obedience to your orders, of submission to your advice, of attention to your rules about diet and sanitary matters, and by encouraging patience and quietness of spirit. I am sure you can help us by gently and wisely reminding those whose cases are past recovery, that it is their duty to accept the inevitable, that this life is not all, that they have souls as well as bodies, and that it is wise to look calmly at their latter end, and a world to come, and to prepare to meet God. We have much in common in our two professions, you in caring for men's bodies, and we in caring for men's souls. Like yourselves, we cannot command success and give health at our will. Too often, like yourselves, we visit in vain, exhort in vain, advise in vain, preach in vain. We find that life and death are in higher hands than ours. You find that under the most skilful treatment people will die, and we find that under the most faithful teaching many continue unmoved in conscience, and dead in sins. Like yourselves, we often feel our ignorance, cannot diagnose and discern symptoms, and feel doubtful what to say. We have both great need to be clothed with humility. But I trust, like Sir Henry Lawrence, we both "try to do our duty" and persevere. That there never may be wanting in Great Britain a continual supply of able, right-minded, faithful medical men, and that we who minister to the soul, and you who minister to the body, may always work harmoniously together, and help one another, is the earnest prayer of him who addresses and welcomes you here to-day.

NORTH OF SCOTLAND MEDICAL ASSOCIATION.

THE annual meeting of this Association, which comprises several societies throughout the North of Scotland, was held at Aberdeen recently. As usual, visits to the medical institutions were first made. The Association had this year to mourn the loss of its president, Professor Pirrie, and Dr. Jamieson, of Peterhead, took the chair. Dr. Manson, of Banff, as president for the year, then delivered an address on the progress of medicine and surgery during his own time. He gave an interesting retrospect of the workers in the Aberdeen school during the past fifty years, and dwelt with particular regard on the memory of Dr. Pirrie, whose teaching power he believed to be almost unequalled. Recalling the days when there were two schools—mural and extra-mural—in Aberdeen, he showed that in the former there were then but two professors, and one of these was Dr. Macrobin, only recently removed from among the new order of things which he had seen arise. The lecturer in midwifery disdained the use of any other than his own Aberdeenshire dialect, and was looked upon as an eloquent exponent of the art. Many other names of more than local note were then referred to, and Dr. Manson went on to contrast the school as it now exists with that of his student days. The university seemed now almost fully equipped, thanks to her latest benefactor, Sir Erasmus Wilson; and, in consequence of Dr. Struthers' enthusiastic and successful efforts, funds were being rapidly raised for the encouragement of the best work on the part of students. Altogether the outlook for the university was very bright. The practice of medicine, as carried on fifty years ago, was next adverted to; and though the bi-annual venesections could not be recommended, Dr. Manson believes that great good resulted in many cases. The operation was performed "for some anomalous state, consisting of a feeling of weight, lassitude, and dimness of sight, which occurred in summer or autumn to numerous individuals. Some would be induced, but with difficulty, to try medicine of the saline-cathartic nature, but always unsuccessfully. For the remedy—that is, bleeding—if you withheld, they invariably went to the men and midwives who practised that method. Many a time he had bled them, and while the blood was still flowing they stated that they felt lighter, and that they could see more clearly. But just before this feeling was experienced the blood could be seen, which was flowing slowly before, to spout with greatly increased force. The explanation would seem to point to an over-distended state of the heart and vascular system, which, when relieved, could act with greater vigour upon its contents. This operation was performed for one shilling. The relief experienced by this periodical bleeding was probably due to the removal of a recurrent plethora established by custom. The regular treatment of all acute inflammations was bleeding, sometimes to the extent of two good-sized platefuls. Free depletion was followed up with tartar emetic, calomel and opium, and blistering." Dr. Manson believes that this practice has now been too completely given up. In cases in which the breathing was laboured, the abstraction of blood till the breathing became relieved, followed by the above medicaments, prevented much of the effusion in pneumonia, and recovery was earlier and more complete. The inflammatory action ceased when the action of calomel and opium was established, and recovery was rapid. Pleurisy quickly yielded to the same treatment, with the addition of wet cupping. Cranial paralysis was again and again warded off by general depletion. Another favourite method of treatment was the introduction of issues and setons; and the moxa was often of great benefit in spinal cases. Dr. Manson, in conclusion, made some reference to the introduction of chloroform, and then concluded an address which must be useful as the ripe experience of an able practitioner. It was agreed, on the motion of Dr. Jamieson, to publish the address, and to award a very hearty vote of thanks to Dr. Manson. In response to the secretary's invitation, Dr. Struthers spoke, not very hopefully, of the prospects of medical legislation for this session, and trusted, if delay were enforced, it might remove some of the present stumbling-blocks. Dr. Rodger read a favourable balance sheet; and afterwards, on the nomination of the Buchan Medical Society, Professor Struthers was unanimously elected president for the ensuing year.

INTERNATIONAL CONGRESS OF COLONIAL MEDICINE AT AMSTERDAM.

THIS Congress will open on the 6th of September, under the presidency of Professor Stokvis, and the programme as at present arranged includes the following subjects:—1. Quarantine: Reports by Dr. de Chaumont of Netley, and Dr. F. J. van Leent of Amsterdam; and a communication by M. J. A. Kruyt, Dutch Consul at Djeddah. 2. Special Education for Colonial Physicians, reported on by Col. Becking of Utrecht, with a communication from Dr. Dyce Duckworth of London. 3. Hygiene of Professions and Unhealthy Trades in the Colonies, by Dr. da Silva Amado of Lisbon; with a paper on European Colonisation in Tropical Countries, by Dr. G. van Overbeek de Meyer of Utrecht.

4. The Modifications which certain Diseases, especially Infectious Disease, undergo in Tropical Climates; reported upon by Dr. Walther of Paris, and Dr. Norman Chevers of London. 5. On Phthisis in the Colonies and Tropical Climates, reported by Dr. B. Carsten of La Haye. 6. On the Treatment of Exotic and Tropical Diseases in Temperate Climates; reported on by Sir Joseph Fayrer of London, Dr. A. le Roy de Méricourt of Paris, Dr. Joseph Ewart of London, and Dr. A. Corre of Brest; with a paper by Dr. J. Baart de la Faille of Leeuwarden.

In addition to this ample programme several other papers are promised, as follows:—Dr. F. A. Eklund of Stockholm: On Diabetes Mellitus. Dr. Bonnafont of Paris: On the mode of Soil Drainage by Eucalyptus; or, Why are so-called Pernicious Fevers more dangerous in a Tropical than in a Temperate Climate? Dr. E. Waring of London: On some Indigenous Remedies of Tropical Countries. Dr. B. Scheube of Leipzig: On Beri-beri. Dr. J. B. Scriven of London: On the Treatment of Malarial Fevers by Subcutaneous Injections of Quinine. Dr. Schuster of Aix-la-Chapelle: On the Elimination of Mercury introduced into the Body by the Skin. Dr. Gori of Amsterdam: On Transport of the Sick and Wounded by Railways in Tropical Countries.

Professor van den Corput of Brussels will raise the following questions:—1. Medical geography in relation with pathological etiology. Inquiry and determination upon the factors causing the absence or prevalence of such diseases as cancer or tuberculosis in certain countries or under certain climates. 2. Foundation of an international medical league, with the aim of mutual instruction on the epidemic development of infectious diseases, and for instituting the most convenient measures for preventing them or for limiting their spread. Creation of international nosological bulletins. 3 International inquiry on the causes of intemperance and the affections due to it. Research into the most suitable means for repressing the abuse of alcoholics. 4. To determine the influences which the progress of modern civilisation has exerted on the nature and treatment of disease.

ARMY MEDICAL SCHOOL.

THE summer session of the Army Medical School terminated on Monday, the 6th inst., when the prizes at the disposal of the Senate of the School were handed to the successful competitors before a large assemblage of distinguished officers and other visitors by Sir Galbraith Logan, K.C.B., who was Director-General of the Army Medical Department between the years 1867 and 1874. During the period Sir Galbraith Logan occupied this high official position he always exhibited a strong personal interest in the school, and took an active part in its administration; and, as he mentioned in commencing his address, when he acceded to the request of the Senate to distribute the prizes, and to deliver some remarks on the occasion, he had been chiefly prompted to do so by the strong desire he felt to show publicly the great value he still attaches to this establishment.

At the commencement of the proceedings the lists of the surgeons on probation who had passed successfully through the courses of special instruction for the Medical Department of Her Majesty's British and Indian Armies (given in another column) were read by Surgeon-General Longmore, C.B., together with various reports on the results of the examinations, intended for the information of the Secretaries of State for War and India.

A notable feature of the present session has been that all the prizes, with a single exception, have been carried off by one of the surgeons on probation, Mr. J. M. Young, of the Indian Medical Service. This gentleman, we are informed, acquired his professional education at Glasgow and Vienna. In handing to Mr. Young, in succession, the Herbert, Martin, Parkes, and Montefiore medals and prizes, Sir Galbraith Logan made some happy references to the special advantages that might be hoped for to the publice service from the superior ability which Mr. Young had manifested in the various branches of professional knowledge which the rewards represented; and he dwelt also with much feeling on the exalted characters and distinguished services of Dr. Parkes and Sir Ranald Martin, with both of whom he had been on terms of intimate friendship, and to perpetuate whose memories the medals bearing their names had been founded. He said he could not imagine two nobler patterns of life to set before the young surgeons for imitation than the lives and careers of those eminent members of the medical profession in the two branches of the military service, the British and the Indian, to which Dr. Parkes and Sir Ranald Martin had respectively belonged. We cannot reproduce the whole of Sir Galbraith Logan's address, which extended over a wide range and was listened to with marked attention, but one fact that he mentioned in the course of his remarks has not, as far as we are aware, been hitherto brought to notice in the manner which it seems to deserve, and we therefore repeat it here. In speaking of the excellent manner in which the medical service was conducted during the recent campaign in Egypt, as shown by the professional results, and when particularly alluding to the changes that had taken place in the manner of treating Egyptian ophthalmia, Sir Galbraith stated that while, as now well known, not a single case of blindness had resulted from the late campaign, on the other hand, in the earlier campaign under Sir Ralph Abercrombie, not only was an enormous expense entailed on the State in pensioning the very large number of soldiers who became deprived of sight from the disease, but beyond that, the ophthalmia acquired such a pernicious character, and proved so infectious among the men who escaped from the extreme result of blindness, that, as regarded some of the regiments which served in that war, the disease was not eradicated from them for five-and-twenty years afterwards. Thus a great additional cost was entailed on the country, both in the disability for service and necessary hospital treatment which the persistence of the disease led to, and in the invaliding and discharge from the army which its consequences in numerous instances rendered unavoidable.

After the proceedings in the lecture-room of the School were concluded the company were entertained at luncheon by the officers of the Army Medical Staff in their spacious mess-room.

SANITARY INSTITUTE OF GREAT BRITAIN.

AT the ordinary meeting of the Institute held on July 24th, Dr. A. Carpenter, in the chair, a paper was read by Professor W. H. CORFIELD, M.A., M.D., on the "Compulsory Notification of Infectious Diseases."

The author said that the facts which he proposed to lay before them had been chiefly obtained from replies to a set of questions which he had sent to the medical officers of health of the various towns where regulations for the compulsory notification of infectious disease were in force. After giving statistics and opinions of the medical officer of health as to the satisfactory working of the regulations in the eighteen towns from whom he had received returns, Dr. Corfield said:—From the facts that I have laid before you, I have been forced to the conclusion that the compulsory notification of infectious diseases is a very important sanitary measure, and a great boon to the community to whom it has been applied. There can be no doubt whatever that, in a vast number of cases, information has been obtained of the existence of infectious disease which would never have been obtained at all, or, if obtained, would have come too late to be of much service. Everyone who has had anything to do with the prevention of epidemic diseases, knows that the most important thing of all is to get the earliest information of the cases that arise, and that an epidemic may be checked and stamped out with comparative ease if it is taken in hand early enough, but that the difficulty increases every day that is lost. The objection that cases of concealment are likely or even certain to occur where such Acts are in force has been completely met by the quotations that I have made to you; but, to my mind, this objection of which so much has been made, is so childless as to be almost ludicrous. If there are cases of concealment every day where such an Act is in force, there are many times as many such cases where no Act is in force. One would have thought that it must have been obvious to everyone that in the towns where a hundred cases are reported under the Act, while only ten were reported during the same time before the Act was passed, at any rate, there were ninety cases reported under the Act which would have been concealed without it. With regard to the

vexed question as to whether the medical attendant or the householder, or both, should be compelled to notify the existence of cases of these diseases to the sanitary authority, the most general practice appears to be to make it compulsory upon both; but the evidence, as I understand it, shows that at any rate medical men should be required to give the information, and also that they should be required to give it direct to the sanitary authority, rather than to the householder. This is a matter upon which I do not insist strongly, but simply to give the impression that the results of the inquiries have left upon my mind. I think that the evidence is very strong that in most places, at any rate, little or no difficulty has arisen from the medical men being compelled to give this information. As to the suggestion that these Acts, so far from diminishing the number of cases of infectious diseases, are likely to increase them, I would ask you, do you think it likely that, without any exception, the medical officers of health of the towns where these Acts are in force would support them strongly if they thought the number of cases of infectious diseases was going to be increased by them? The business of medical officers of health is to prevent disease—especially such diseases as these; and he gains credit by doing this, and not by increasing them. Do you suppose that these medical officers of health do not know their own business, or do you suppose that they have combined together to do that which must certainly bring discredit upon themselves? I ask you, on the contrary, to believe that the medical officers of health of these towns know the way to prevent infectious diseases from spreading, and are doing their utmost to lead the medical profession, and the public generally, up to the point of seeing the great need for the passing of such an Act as those which have been so beneficial where they have been applied for the whole kingdom. And I take this opportunity of thanking all those gentlemen for the trouble they have taken in answering the questions sent to them, and so enabling us to epitomise the evidence on the subject.

The following gentlemen took part in the discussion:—Dr. A. Carpenter, Ernest Turner, Dr. Dudfield, Dr. Walford, and T. Lightfoot.

WILLS OF MEDICAL MEN.

THE will and two codicils of William Farr, C.B., M.D., F.R.S., D.C.L., formerly Superintendent of the Statistical Department of the Registrar-General's office, late of 78, Portsdown-road, Maida Vale, who died on April 14th last, have been proved by Lieutenant William Farr, R.N., the son, and Mr. Joseph Whittall, two of the executors, the value of the personal estate being over £3600. The testator bequeaths to his son William the diamond ring presented to him by the Emperor of Russia, and legacies to his executors. The residue of his property is to be divided between all his children in equal shares.

The Scotch confirmation, dated June 29th last, granted by the Sheriff of Dumfries and Galloway, of the will of George Arnott, M.D., formerly of Cheltenham but late of Kirkconnel Hall, Ecclefechan, shire of Dumfries, who died on May 15th last, to Mrs. Jane Arnott, the widow, and Captain Napoleon Arnott, the accepting executors nominate, was sealed in London on the 16th ult., the personal estate in England and Scotland amounting together to upwards of £31,000.

The will and codicil of George Clerihew, M.D., Inspector-General of Hospitals, late of 43, Addison-gardens, North Kensington, who died on May 30th last, were proved on the 9th ult. by Mrs. Elizabeth McCulloch Clerihew, the widow, and Mr. John Edmund Bentley, two of the executors, the value of the personal estate amounting to over £12,000. The testator leaves to his wife £500 and his freehold residence with the furniture and effects and an annuity of £500 for life. The income of the residue of his property, including his heritable property in Scotland, is to accumulate during the lifetime of his wife, and at her death the whole is to be divided between all his children.

BEQUESTS.—By the will of General Upton, late of Bruton-street, Middlesex Hospital becomes entitled to £1000, and Kilburn Dispensary to £500.

Public Health and Poor Law.

LOCAL GOVERNMENT DEPARTMENT.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

Birmingham.—Dr. Alfred Hill is able to point, in his annual report for 1882, to a progressive and very marked decline in the death-rate for the borough during the past three years. Last year it amounted to 20·6 per 1000 living, at all ages. As a rule vaccination is efficiently carried out in the borough, but in the parish of Aston much less energy is displayed in this matter than elsewhere, the result being that Birmingham is more open to invasion by small-pox in this locality than anywhere else. Scarlet fever has been widely prevalent in the borough. Waves of this disease pass over the borough about every four years, as the infantile and susceptible population is periodically replaced by births; and one of these waves reached its culminating point in 1882, when 256 deaths from this cause were recorded. The severity of this last outbreak compares favourably with the two preceding ones, and much of the lessened mortality is attributed to the increased use of the borough fever hospital. That establishment is, however, by no means such a one as should be possessed by a borough like Birmingham, and we trust that the steps now in progress for providing one more in accordance with the needs of the population will end in the erection of a new and appropriate building. Altogether 627 cases of scarlet fever and 105 cases of small-pox were admitted into the hospital last year, and it is satisfactory to note that in no single instance has any case occurred in the neighbourhood of the institution which could in any way be traced to it. The disinfecting station, which is fitted with one of Dr. Ransom's stoves, continues to perform most useful work, the number of articles dealt with in it last year being 8206, a considerable increase on that for any previous year. Some progress is being made in the abolition of midden-privies, but it is slow, and the cleansing of thoroughfares and courts is not carried out with the efficiency which the importance of this work demands. An interesting account is included in the report of the principles of the various smoke-preventing appliances which were displayed at the International Exhibition at South Kensington. Birmingham is one of those towns which suffer so much from smoke-laden fogs, and Dr. Hill expresses the belief that the nuisance is almost as much due to private chimneys as to those belonging to manufacturers. Hence, he summarises the conditions which are applicable to both classes of fires with a view to the prevention of the evil. Other matters, such as the question of electric lighting, &c., are also fully dealt with, and the numerous statistical tables embodied in the report give it an interest by no means confined to the locality in the main affected by them. A disease chart is appended, so that the localities principally affected by preventable disease can be seen at a glance. In his capacity as borough analyst, Dr. Hill reports that the percentage of adulteration in milk cases continues to decline, a matter of some importance in view of the fact that Birmingham has occupied an unenviable notoriety in respect of milk adulteration. Butter and bread have been almost free from fraudulent admixtures, and the result as regards most other articles of food has in the main been highly satisfactory.

Kensington.—Dr. Dudfield issues some useful and well-timed suggestions to the inhabitants of his district as to the prevention of infectious diseases, the advice given relating both to action needed in the sick chamber and about the affected premises generally. The existence of a public mortuary is referred to, and the regulations under which bodies are received into it are enclosed. The methods of disinfection are indicated, and it is announced that the poor can be supplied with disinfectants free of cost.

Hackney.—In his annual report for 1882 as to the sanitary state of the Hackney district, Dr. Tripe gives some account of certain unusual defects in the drainage of houses which had come under his notice in connexion with the prevalence of disease or nuisance, and he points out how large an amount of work is steadily in progress as to the disconnexion of sinks from house drains. Thus, 1474 sinks have been dealt with in this way; as many as 1446 stack-pipes have also been disconnected, so that foul air shall not be

conveyed by their means into the proximity of bedroom windows; and as many as 2951 bell-traps have been replaced by some more efficient apparatus. The due flushing of closets has also been carefully attended to; no less than 2381 houses having been improved in this respect. As regards the fever hospital belonging to the Asylums Board, which lies within the Hackney district, Dr. Tripe states that there were but few cases of zymotic disease in its vicinity. There was about one case per 1000 population of scarlet fever within a quarter of a mile radius of the establishment, against 2·5 per 1000 in the whole district, and 0·8 cases of typhoid fever within the quarter-mile radius, against 0·6 for the whole district. As regards small-pox, the statistics cannot, for reasons assigned, be given with accuracy, but Dr. Tripe's opinion is that the proportion of cases outside the quarter-mile radius was as great as that within it. The number of cases under treatment in such hospitals is, however, very generally believed to affect the distribution of this disease, and hence much would depend on the extent to which patients were aggregated together at any one time. The ambulance station established at London Fields is spoken of as being maintained in a state of efficiency; and there has been an entire immunity from small-pox in its neighbourhood ever since its establishment. The arrangements in this part of the metropolis as respects offensive trades remain much the same as heretofore. When persons intend establishing such trades, they are informed that directly nuisance arises proceedings will be taken against them; and the result during the past year, as in previous ones, has been that no one has ventured to fit up premises for such a purpose. The threat, too, is known not to be merely an empty one; for two manufacturers already in the district found it better to leave and settle in another metropolitan area than to comply with the conditions of the Hackney vestry. The population of Hackney in 1882 was 195,000; the density of population per acre is 49·6; the average number of inhabitants per house is 6·7; the birth-rate was 32·9, and the death-rate 17·9, per 1000—the latter rate being the lowest ever recorded by Dr. Tripe.

Sunderland Port.—The sanitary administration of this port appears fairly complete, except in so far as the only hospital available is the old and very inefficient one, already insufficient for the borough, for which it also has to serve. The inspection of shipping is carefully carried out, and it extends, as it should do, to ships not having disease on board. According to some reports we receive, the inspection is limited to those vessels only which have infectious cases on board, instead of being so contrived as to secure examination of all the conditions calculated to influence the health of crews and of passengers. In all, 1928 vessels were thoroughly inspected in 1882, and improvements made where necessary. The result of this action has been a marked change for the better in the sanitary state of the shipping; and Mr. Harris, the port medical officer, points out that, whereas in 1876 no less than 60 per cent. of the vessels were in an unsatisfactory state, there were last year only 19 per cent. in a simlar condition. Sometimes vessels leave the port before the needed alterations are made, but it is satisfactory to find that in such cases the evils complained of, and which consist largely in defects of closet accommodation, overcrowding of crew, &c., have been remedied before the vessels return to the Wear on their next voyage. Mr. Harris, amongst other things, calls attention to a growing evil and injury to health amongst those occupying the forecastles, owing to the condensation of the moisture of the atmosphere on the iron decks. The same result was experienced in our iron ships belonging to the Royal Navy, and it was found difficult to sheath the iron with wood, but the evil has now been largely done away with by the adoption of one or other of the following methods:—After painting the iron work, cork dust is dashed on to the wet paint, and when it has firmly set it receives either another coat of paint or of whitewash, and it thus presents a surface facilitating the absorption of the moisture. The other method consists in covering the surface of the wet paint with a layer of calico, which thus adheres to the metal. Either method involves but a very small cost, and by the adoption of one or the other it is found that the injurious effects so justly complained of by the seamen are very materially mitigated.

INFECTIOUS DISEASE IN BOARD SCHOOL CHILDREN.

At a recent meeting of the London School Board Mr. Mark Wilks (the chairman of the school management committee), moved, "That article 133 (v.) of the Code of Regulations for the Guidance of Managers and Teachers be amended, so as to read as follows:—Any child showing symptoms of an infectious disease, or any child coming from a house where infectious disease exists, must be sent home at once. The medical officer of health for the district must at the same time be informed of the child's exclusion, and furnished with the name and address of the child and the reason for its exclusion. Where there is not a medical officer of health the information must be forwarded to the sanitary authority. Any child suffering from scarlet fever, diphtheria, small-pox, or typhus fever, and excluded under this rule, should not be allowed to resume attendance at school within two months, unless a certificate from the medical officer of the sanitary authority or of the union is produced to show that it may safely be readmitted; but when a child has been attended by a duly qualified medical practitioner his signature shall be sufficient. If the school fees are remitted for such child or paid by the guardians of the union at the time of its exclusion, the cost of the above certificate will be defrayed by the Board." The proposition was agreed to without discussion.

A NEW FEVER HOSPITAL FOR THE EAST END.

At the meeting of the managers of the Metropolitan Asylums Board, on Saturday last, after a discussion on some of the provisions of the Diseases Prevention Bill now before the House of Commons, a motion was carried affirming the necessity for an additional Fever Hospital for the eastern district of the metropolis, and that the recommendation for the erection of the same be forwarded to the Local Government Board.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

In twenty-eight of the largest English towns, 5527 births and 3296 deaths were registered during the week ending the 4th inst. The annual death-rate in these towns, which had been equal to 22·2, 21·3, and 20·1 per 1000 in the three preceding weeks, further declined to 20·0 last week. During the first five weeks of the current quarter the death-rate in these towns averaged 20·6 per 1000, against 23·1 and 19·3 in the corresponding periods of 1881 and 1882. The lowest rates in these towns last week were 9·7 in Plymouth, 11·0 both in Cardiff and in Derby, and 11·2 in Birkenhead. The rates ranged upwards in the other towns to 22·8 in Huddersfield, 23·4 in Manchester, 27·0 in Preston, and 33·2 in Newcastle-upon-Tyne. The deaths referred to the principal zymotic diseases in the twenty-eight towns, which had been 813 and 747 in the two previous weeks, further declined to 661 last week; they included 305 from diarrhœa, 139 from measles, 95 from scarlet fever, 49 from whooping-cough, 47 from "fever" (principally enteric), 22 from diphtheria, and 4 from small-pox. The highest death-rates from these zymotic diseases were recorded last week in Sheffield, Preston, and Newcastle-upon-Tyne. The deaths attributed to diarrhœa in the twenty-eight towns showed a further decline of 108 from recent weekly numbers; the highest death-rates from this disease were recorded last week in Bolton, Sheffield, Leicester, and Preston. The deaths referred to simple cholera and choleraic diarrhœa in the twenty-eight towns were 7 last week, and 5 less than the number in the previous week. Measles was proportionally most fatal last week in Salford and Newcastle-upon-Tyne; scarlet fever in Sheffield, Birmingham, and Leeds; and "fever" in Sunderland and Halifax. The 22 deaths from diphtheria included 16 in London and 2 in Leeds. Small-pox caused 1 death in London, 1 in Birmingham, 1 in Sunderland, and 1 in Newcastle-upon-Tyne. The number of small-pox patients in the metropolitan asylum hospitals, which had been 53 and 55 on the two preceding Saturdays, declined to 48 at the end of last week; 6 new cases were admitted to these hospitals during the week, against 4 and 7 in the two preceding weeks. The deaths referred to diseases of the respiratory organs in London, which had been 179 and 161 in the two previous weeks, rose again to 168 last week, although they were 12 below the corrected weekly average. The causes of 85, or 2·6 per cent., of the deaths in the twenty-eight towns last week were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Brighton, Portsmouth, Plymouth, Leicester, and in three other smaller towns. The proportions of uncertified deaths were largest in Oldham, Preston, Sheffield, and Sunderland.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had been equal to 20·3 and 18·5 per 1000 in the two preceding weeks, rose to 21·6 in the week ending the 4th inst., and was 1·6 above the mean rate during the week in the twenty-eight English towns. The rates in the Scotch towns ranged from 13·3 and 15·3 in Aberdeen and Perth, to 23·5 and 24·8 in Paisley and Glasgow. The deaths in the eight towns included 92 which were referred to the principal zymotic diseases, showing an increase of 16 upon the low number in the previous week; 33 resulted from diarrhœa, 18 from whooping-cough, 17 from measles, 12 from scarlet fever, 8 from diphtheria, 4 from "fever," and not one from small-pox. These 92 deaths were equal to an annual rate of 3·9 per 1000, which was slightly below the rate from the same diseases in the large English towns. The highest death-rates last week from these diseases in the Scotch towns occurred in Paisley and Glasgow. The 33 deaths attributed to diarrhœa exceeded those in the previous week by 9, but were 22 below the number in the corresponding week of last year; 21 occurred in Glasgow and 5 in Aberdeen. The 18 deaths from whooping-cough included 15 in Glasgow, and corresponded with the number in the previous week. The 17 fatal cases of measles exceeded those in the previous week by one, and included 6 in Glasgow, 5 in Edinburgh, and 3 in Paisley. Nine of the 12 deaths from scarlet fever were returned in Glasgow; also 3 of the deaths referred to "fever." The deaths referred to acute diseases of the respiratory organs in the eight towns were 76 last week, and were 2 above the number returned in the corresponding week of last year. The causes of 97, or nearly 19 per cent., of the deaths in the eight towns last week were not certified.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which had been equal to 22·7 and 21·8 per 1000 in the two previous weeks, further declined to 17·2 in the week ending the 4th inst., and was considerably lower than the rate in any previous week of the year. The mean death-rate in the city during the first five weeks of the current quarter was 21·0 per 1000, against 21·4 in London and 17·3 in Edinburgh. The 115 deaths in Dublin last week showed a considerable decline from recent weekly numbers; they included 3 from "fever," 3 from diarrhœa, and not one either from small-pox, measles, scarlet fever, diphtheria, or whooping-cough. Thus only 6 deaths resulted from these principal zymotic diseases, against 15 and 9 in the two previous weeks; they were equal to an annual rate of but 0·9 per 1000, the rates from the same diseases being equal to 4·2 in London and 2·9 in Edinburgh. The deaths referred to "fever," which had declined from 7 to 2 in the four previous weeks, were 3 last week. The 3 deaths attributed to diarrhœa were within 2 of the number in the previous week. The deaths of infants showed a further decline from recent weekly numbers, and those of elderly persons were also less numerous. Seven deaths were referred to different forms of violence. The causes of 20, or more than 17 per cent., of the deaths registered during the week were not certified.

MORTALITY STATISTICS IN HEALTH REPORTS.

All those who for various reasons may have to study, with a view to draw practical and useful deductions from, the large number of health reports which are now from time to time presented to their sanitary authorities by medical officers of health, must be grateful for any attempt to secure some extent of order and uniformity in the tables of mortality used in such reports, which are now for the most part comparatively useless for want of these necessary qualifications. We have received from the Metropolitan Society of Medical Officers of Health a copy of their suggested forms of tables of mortality, being a revision of the forms drawn up and issued by them in 1874. Greater uniformity is the most important desideratum in this matter, and while there are few subjects on which there is more room for diversity of opinion than in the forms of tables, it will be a great boon if the suggested forms should be even in part more generally followed. One of the main causes for the revision of the forms of these tables is the adoption by the Registrar-General of a modification of the system of nosological classification used in his reports. With reference to the causes of death, however, we regret that the Society of Medical Officers of Health have not seen their way to recommend some abridgment of the Registrar-General's full list, which is most assuredly unsuited to reports of the hundreds of urban sanitary districts having populations under 100,000 persons. In one other respect we much regret that the suggested tables make no recommendation as to giving rates of mortality at a few well-marked groups of ages, than which no statistics are more important as tests of sanitary condition. As regards children under five years of age, for instance, the proportion to total deaths is of little value, and is very often absolutely misleading; whereas the proportion to the estimated number living at those ages is a most valuable sanitary test, as it is strictly comparable in different populations. We regret this the more since we understand that the Census Report now in course of publication gives for the first time the age distribution of the population of each urban and rural sanitary district, thus affording the means for calculating rates of mortality at different groups of ages.

WEST INDIAN MORTALITY STATISTICS.

We are in receipt of a report on the sanitary condition of St. Thomas, West Indies, for the thirteen weeks of the second quarter of this year, issued by Dr. A. Magens, King's Physician. In a population estimated at 15,000, the mean annual death-rate for the quarter was 24·0 per 1000, the rate ranging in the thirteen weeks from 45·1 to 10·4, fluctuations which may confidently be expected in so small a population. Of the 90 deaths reported during the three months, 2 were referred to gastric fever and 11 to diarrhœal diseases, these being the only fatal diseases of a zymotic character. The proportion of infant mortality was, as might be expected, excessive, 22 of the 90 being of infants under one year of age. The return shows 89 births (probably below the true number), which gives a proportion of infant mortality equal to 248 per 1000, and very nearly double the proportion that prevailed during last quarter in England and Wales. A system of weekly notification of diseases appears to prevail in St. Thomas; and 375 cases of disease reported during the thirteen weeks of the quarter are appended to the report. It is noteworthy that 26 cases of so-called gastric fever appear in this table, and not a single one of typhoid fever, although there is a heading for that disease. The value of this quarterly return would be much increased by the addition of a table affording the means of comparison with the figures for previous corresponding quarters.

THE SERVICES.

DIPHTHERIA AT ALDERSHOT.

During the past three months a number of cases of diphtheria have occurred at Aldershot. Between the middle of May and the beginning of July there were eighteen cases, mostly in the permanent Stone Barracks, of which four proved fatal. The disease appears to have been checked, as there have been no fresh cases for a period of six weeks. A board of officers is at present engaged in an inquiry as to the causes of this outbreak, and into the existence of any sanitary defects in the barracks.

THE CASE OF SURGEON CORBIN.

We have received from Mr. Corbin a copy of a letter published in the *Guernsey Telegraph*, in which he explains the circumstances under which he was removed from the militia by the Lieutenant-Governor of the island. Mr. Corbin admits having disobeyed an order of the Major-General commanding, and for this act he was removed. The tone of his letter is that of insubordination, and affords proof of the correctness of General Nelson's decision. If officers are permitted to disregard the orders of those in command, because they think them arbitrary or even unjust, what is to become of discipline, and how can they expect the men to obey their orders when they set such an example? The first duty of a soldier is obedience; he must obey first and may remonstrate afterwards. At a time when so much has been said as to the fitness of medical officers to carry on the discipline in hospital, we cannot but regret to find a medical officer of the reserve forces setting an example of insubordination in a very trifling matter. If Mr. Corbin is sincere in expressing his "grateful thanks" to Major-General Nelson for "the boon" of having relieved him from further militia duty, it would, in our opinion, have been

better for himself, his profession, and the public service if he had withdrawn by resignation instead of placing himself in a position to be removed for insubordination.

INDIA OFFICE.—Brevet: Deputy Surgeon-General John Lumsdaine, of the Bombay Army, to be Surgeon-General.

RIFLE VOLUNTEERS.—2nd Volunteer Battalion, the Prince Albert's (Somersetshire Light Infantry): The undermentioned Surgeons are granted the honorary rank of Surgeon-Major:—Edward Liddon, M.D., and Washington Lafayette Winterbotham, M.B.

ADMIRALTY.—The following promotions and appointments have been made: Staff-Surgeons John Horrocks, Henry Dawson Stanistreet, and William Bainbrigge Fletcher to be Fleet Surgeons. Surgeon Standish T. O'Grady to Bermuda Hospital, vice Rae; Surgeon John O'Callaghan to Plymouth Hospital, vice O'Grady; Surgeon Henry T. Cox to the *Cambridge*, vice O'Callaghan; Surgeons B. S. Mends and T. J. Crowley to the *Duke of Wellington*, additional, for disposal; Surgeon A. Keess, additional, to the *Pembroke*, for disposal; Surgeon D. Lennox to the *Lord Warden*; Surgeon B. C. E. F. Gunn, to the *Asia*, additional, for disposal; Surgeons J. E. Penn and R. H. Nicholson to the *Royal Adelaide*, additional, for service at Plymouth Hospital; Surgeon P. B. Bury to the *Hector*; Surgeon J. N. Seymour to the *Impregnable*, additional, for disposal; Surgeons J. L. Barrington and J. Sagrue to the *Cambridge*, additional, for disposal; Fleet Surgeon Edward Meade to the *Asia*, vice Thomas Robert Warren to the *Penelope*, vice E. Meade; Surgeon Robert James M'Cormack to the *Frolic* (appointment of William Manley Lory cancelled).

Correspondence.

"Audi alteram partem."

THE CHOLERA AND HAGAR'S WELL AT MECCA.

To the Editor of THE LANCET.

SIR,—The following correspondence, which speaks for itself, is of such an interesting and important nature at the present time that I send this copy to you in the hope that through publication in THE LANCET the question raised may attract attention, and possibly meet with some practical consideration. In spite of the action taken in the matter by Sir Joseph Hooker and Mr. Thiselton Dyer, and by Dr. Frankland in his letter to *The Times* less than two years ago, the facts stated below have been apparently quite forgotten, and are in no way referred to among the numerous guesses that are now being made afresh concerning the momentous question of the origin and propagation of Eastern cholera. It may be at least worth while to search for the truth about cholera, even at a lesser depth than at the bottom of Hagar's well. The copy of the letters I send you has been very kindly furnished by Mr. Thiselton Dyer.

I am, Sir, yours obediently,

Upper Berkeley Street, W., Aug. 3rd, 1883. H. DONKIN.

[COPY.]

Royal Gardens, Kew, Nov. 13th, 1881.

SIR,—I am desired by Sir Joseph Hooker to forward to you, for the consideration of the Secretary of State of India in Council, the enclosed communications from Dr. Frankland, Professor of Chemistry in the Royal College of Chemistry, South Kensington Museum. The circumstances which have given rise to these, are briefly as follows:—Mr. James Zohrab, Her Majesty's Consul at Jeddah, is an old correspondent of the Royal Gardens. On recently returning to this country, he forwarded to Kew a considerable scientific collection of dried plants made by him in the neighbourhood of Jeddah. The package also contained two bottles of water from Hagar's well at Mecca. Of these, Mr. Zohrab guaranteed the authenticity, and he expressed the wish that they should be placed in the hands of some scientific man who would take the trouble to investigate their contents. I accordingly communicated with Dr. Frankland, who probably has greater experience than any man living in the investigation of potable water. Dr. Frankland very kindly undertook the examination, and he communicated a preliminary account of the results to *The Times* for September 9th. He now desires that the whole subject should be brought officially under the notice of the Government of India. And looking at the fact that the cholera is now raging at Mecca, Sir Joseph Hooker feels assured that, though the subject is foreign to the strict scope of this department, the Secretary of State will not deem it intrusive that his attention should be invited to the matter. I am, Sir, your most obedient servant,

(Signed) W. T. THISELTON DYER.

Sir Louis Mallet, C.B., India Office.

[COPY.]

Royal College of Chemistry,
South Kensington Museum, S.W.
November 11th, 1881.

HAGAR'S WELL, MECCA.

DEAR SIR JOSEPH,—I have received through you a sample of water from Her Majesty's Consul, Mr. Jas. Zohrab, late of Jeddah, and labelled by him with the following note:—"The well is in Mecca. The water is regarded as holy, and large quantities are annually sent as gifts to all Mussulman countries. Most of the Mahomedan princes, especially those of India, have 'keepers of the well,' whose duty it is to send them annually water from the well." I have submitted this water to analysis, and the results which I append hereto appear to me so important as to warrant me in asking you to bring them specially under the notice of the Secretary of State for India in Council. The water is slightly turbid and has a saline taste. 100,000 parts of it contain in solution the very large proportion of 828·24 parts of solid matter, of which a considerable amount is organic and of animal origin. The water also contains an enormous quantity of nitrates—the usual product of the decomposition of animal excreta. The previous animal contamination calculated from the proportion of nitrogen as nitrates and nitrites shows that the liquid supplying this well contains in a given volume nearly six times as much animal matter as is found in the same volume of strong London sewage. This conclusion is confirmed by the presence of a very large proportion of common salt, one of the chief constituents of urine. The suspended matter in the water consists chiefly of dead bacteria.

In answer to my inquiries as to the surroundings of the well, and the authenticity of the sample, Mr. Zohrab writes me as follows:—"In reply to your note regarding the water from Hagar's well brought home by me, I beg to state that it is authentic. It was brought to me last January from Mecca by a Mahomedan gentleman in whose good faith I have implicit confidence. I may also state that several Mussulmans at Jeddah, who had frequently tasted the water at the well itself, and to whom I showed what I had, assured me it was genuine. There is no difficulty whatever for a person at Jeddah to get any quantity of the water, as the well in Mecca is free to all, and anyone may carry away as much as he pleases. I am not at all surprised at the water being heavily charged with excrementitious matter, and the reason, as I will now show, is evident. The city of Mecca, lying in a basin, contains a permanent population of about 40,000 souls, and annually during the Hadj (pilgrimage) from 100,000 to 150,000 pilgrims, who become residents for periods varying from one week to three months, crowd into it. This vast influx of strangers finds accommodation where it can; the well-to-do rent rooms, the poor live in the streets. The houses in Mecca are generally built in flats to accommodate pilgrims; each flat is provided with one or two badly constructed latrines, and there are from six to twelve of these in each house. These latrines empty themselves into pits dug outside the houses. When these get filled they are emptied into other pits, which are made in the streets or any convenient spot, and then covered over with earth. For the poor, latrines on the same principle are made in and outside the town, and the same method of emptying them is employed. This system of burying foul matter in every direction has been pursued for centuries; it is not, therefore, surprising that the ground in and around Mecca is surcharged with excrementitious matter, which rains (these are frequent in Mecca) carry by filtration into the wells. Hagar's well is not a spring, but its water is supplied by filtration—that is, by rainwater passing down through an overlying mass of foul matter. But there is yet another cause for the pollution of Hagar's well, this is the thousands of pilgrims, diseased or sound, who daily wash beside it, the water they use naturally finding its way back into the well."

Such being the surroundings of this holy well, and the composition of its water, there can be no doubt that here is

a most potent source of cholera poison, for the evidence is most conclusive that cholera is propagated by a specific poison contained in the alvine discharges of persons suffering from the disease. Hagar's well, therefore, must, according to Mr. Zohrab's description, constitute an efficient collector of the poison, and it would scarcely be possible to devise a more effective means for the diffusion of this poison throughout Mahomedan countries.

I presume that it would be quite impossible to get this well closed; but in the interests of the health of Europe and Asia efforts ought to be made to guard the water from this abominable and dangerous pollution. In the whole course of my experience I have never met with a sample of drinking water making even a distant approach to the degree of pollution exhibited by the water of Hagar's well.

I remain, yours very truly,
(Signed) E. FRANKLAND.

Sir Joseph Hooker, K.C.S.I., &c., &c.

[COPY.]

India Office, S.W., January 3rd, 1883.

SIR,—I am directed by the Secretary of State for India in Council to acknowledge the receipt of your letter of Nov. 18th, 1881, forwarding the result of an analysis of water stated to have been taken from Hagar's well at Mecca, made by Dr. Frankland, together with his report on the same. In reply, I am to inform you that a copy of these papers will be sent to the Foreign Office and to the Government of India.

I am, Sir, your obedient Servant,
(Signed) ENFIELD.

W. T. Thiselton Dyer, Esq., The Royal Gardens, Kew.

"ACUTE RHEUMATISM AS A PREMONITORY SYMPTOM OF PHTHISIS."

To the Editor of THE LANCET.

SIR,—I observe in your issue of July 14th a communication from Dr. Pollock, relating to the cases reported by me in the preceding number of THE LANCET under the above title. Dr. Pollock summarily disposes of my cases by saying that they are probably mere instances—common enough he believes—of phthisis and rheumatism coexisting in the same individual, the more marked symptoms of the former passing into abeyance during the attack of rheumatism, and kindling again with increased severity on the subsidence of the latter. The essential feature, however, of my cases is the distinctly precursory nature of the rheumatism. Until the attack of rheumatism there had been no indications in any of these cases pointing decidedly to the existence of phthisis. But soon after that, as on a pre-arranged signal, the hitherto latent foe openly advanced to engage its hapless victim. These cases therefore present an essential difference from those, frequently observable, in which one active disease, being temporarily eclipsed as it were by another, resumes its wonted activity on the withdrawal of the suppressing agent. Dr. Pollock refers to the well-known dormant effect which pregnancy produces on the progress of phthisis, and adds, with less true logic than what Coleridge would call "juggle of sophistry," "but it is not asserted that pregnancy is a premonitory symptom of phthisis." We all know that sneezing is a premonitory symptom of measles, and it is not unfamiliar to us that the inhalation of snuff causes sneezing, but it is not asserted that snuff is a premonitory symptom of measles. The value of sneezing, however, as a premonitory symptom of measles remains unimpaired. Dr. Spenser Smyth, on the other hand, in giving the outlines of a case somewhat similar to those reported by me, is not unfavourably disposed to the view that the affection of the joints was caused by tubercular deposit. The value of acute rheumatism, or, more correctly, the group of symptoms simulating acute rheumatism, as a premonitory symptom of phthisis must depend entirely on whether or no it is caused by tubercular deposit. If by tubercular deposit, the affection of the joints is a forerunner, an early phase, and therefore a true premonitory symptom, of phthisis, the disease at first temporarily settling in the joints, which it afterwards leaves for its permanent abode, the lungs. If not caused by tubercular deposit, we may then justly consign these cases to the class of curious coincidences.—Yours faithfully,

J. ALFRED AUSTIN, M.D.

Tongue, Sutherlandshire, July 30th, 1883.

ON THE

NECESSITY OF EXPOSURE OF SOFT CHANCRES WITH REGARD TO TREATMENT.

To the Editor of THE LANCET.

SIR,—Too often one sees in hospital practice a condition of sloughing phagedæna which has extended around the corona and involved the glands, with a history of its having begun as a small sore. These cases are much worse where the prepuce is long, for the pent-up putrescent discharge finds no escape owing to the œdema, and the mischief commencing as a chancre involves the opposed surfaces of mucous membrane, and sooner or later the whole glans and foreskin are one sloughing offensive mass. Besides several others which have lately been admitted, there are now under treatment here three patients the subject of extensive sores of the penis.

In the first case phimosis had existed one week; there was a fetid discharge from the orifice; no sore felt on external manipulation, but a large ragged ulcerating surface, covered by a detached slough, was exposed by an incision through the prepuce; this ulceration surrounded the neck of the glans, and had invaded the tissues nearly down to the urethra. Again, in the second case we had to deal with a sore of the corona, and another at the urethral orifice; both these had the appearance of extending, and were completely hidden by a long œdematous foreskin.

The third case was characterised by sloughing phagedæna of the penis and fore part of the scrotum, with brawniness of the perineum and pubic region. Here multiple incisions were made, tension relieved, and the sloughs removed. The surface of the penis was black and gangrenous. The above patients are up and about the ward, and shortly will take their discharge.

The plan advocated is simply to slit up the prepuce upon a director with a curved sharp bistoury, without anæsthetic. The fear sometimes entertained that the recently cut surface may become specifically affected is practically groundless, so long as it is kept clean. The form of local application is second in importance to the prevention of coaptation of the opposed mucous surfaces.

As gonorrhœa is so frequently concomitant with chancre, it is obvious that this can only be diagnosed and treated with certainty by completely exposing the orifice of the urethra. The formation of bubo with its long-lasting sinus is obviated, the local treatment of sore greatly hastened, and the prevention of cicatricial tissue between the glands and prepuce prevented by the above operation, and I think the results are superior to circumcision, because the incision is not so long in healing, and the organ rendered by no means more unshapely than by the complete removal of the foreskin.

The object of these brief remarks is not to claim any novelty or originality in the treatment, but to enforce the importance of exposing the mischief early, so that it can be treated locally with the best possible result.

I am, Sir, yours obediently,

Kensington Infirmary, July, 1883. PERCY POTTER, F.R.C.S.

"FITS" OF AN UNUSUAL KIND.

To the Editor of THE LANCET.

SIR,—An account of the following case, which is under my charge in the European Station Hospital here, will, I think, be interesting to your readers.

J. C——, aged twenty-eight, gunner R.A., was admitted to hospital on Feb. 28th, suffering from ague, which was cured in a few days by the administration of sulphate of quinine. As he was suffering from general debility, anorexia, and anæmia, and was unable to perform his duties, he remained in hospital till March 14th. On that day he told me that for three months he had been subject to fits, which he thus described: first there was a rushing sound or sensation in the back of his head, then he lost all power of motion, his eyes closed, and he was unable to speak, and although he could hear people talking he could not make out what they said. These fits always occurred when he was in bed lying on his left side or back, and he was sometimes able to put them off by jumping up or turning when he felt them coming, but they usually came when he was asleep. When found in a fit his body is covered with cold perspiration, and when revived

he comes to with a great sigh and feels weak for some time. I have not been able to see one of these seizures myself, but have questioned some of the patients in the same ward and also the apothecary in charge of him. They state that he lies on his back moaning, with his eyes shut (apothecary reports pupils contracted), and without any working of the limbs or frothing at the mouth. If an arm or leg is raised, it falls again as if the muscles were all relaxed; the pulse is slow but regular, and the sphincters are not relaxed. His family history is as follows: Father dead, cause unknown; mother dead, "fever (?)"; grandfather dead, paralysis; one brother and three sisters alive and healthy. Patient had syphilis in 1879, and dates his illness from last year, when he was 128 days in hospital with abscess somewhere about the ankle-joint, which is supposed to have been due to syphilitic deposit. He has not had an attack since March 25th; has not slept in bed since the 23rd of that month, but sits in an arm-chair all night and generally sleeps well in that position. The seizure on the 25th was not nearly so severe as usual. The treatment was quinine, iron, and strychnine; arsenic and quinine; blisters to the nape of the neck; light nourishing diet and a little wine or brandy. At one time the heart's action was a little irregular, but three minims of tincture of digitalis three times a day soon made it all right. Within the last week he has complained of nervous shivering at night, keeping him awake. His bowels have been quite regular throughout, and the urine normal.

If any of your readers can throw any light on this case, I shall be glad to hear from them through your columns. The case does not seem to be epileptic, nor, what is more rare, cataleptic. If syphilitic, it is very extraordinary, and such a case has not been heard of before by yours faithfully,

Dinapore, Bengal. M.B., India.

THE ROYAL UNIVERSITY OF IRELAND.

To the Editor of THE LANCET.

SIR,—In the report of the proceedings of Convocation, in your issue of the 28th July, it is stated that my third resolution on a division was lost. Such was not the case, but an amendment postponing it with the first and second resolutions to the October meeting was carried, it being stated by a member of the Senate that if the unsuccessful candidates would make application to the Senate their cases would be considered. On this representation many members of Convocation voted for the amendment; but I doubt if they would have done so had they been aware that no meeting of the Senate would be held until after the autumn examinations. The unsuccessful candidates have now to wait for twelve months before again presenting themselves for examination. I hope those interested in medical university education will give the subject their best attention when I bring forward these resolutions again at the October meeting.

I am, Sir, faithfully yours,

Harcourt-street, Dublin, Aug. 7th, 1883. C. F. KNIGHT, M.D.

BIRMINGHAM.

(*From our own Correspondent.*)

PRESENTATION TO MR. ALFRED BAKER.

AN interesting presentation was made in the board-room of the General Hospital on the 27th ult., the occasion being connected with Mr. Baker's retirement from active service. On behalf of the subscribers, Mr. T. Kenrick presented to the hospital a life-size portrait in oils of Mr. Baker painted by Mr. F. Holl, R.A., and remarked that during the thirty-three years in which he had served the hospital in various capacities, Mr. Baker had devoted the greatest possible skill and earnestness to his duties. Dr. Russell, as senior physician, then presented to Mr. Baker a silver salver and dessert service, in the name of a large body of subscribers. The salver bears the following inscription ,,—:Presented with a silver dessert service to Alfred Baker, Esq., F.R.C.S., J.P., in acknowledgment of his eminent services and untiring devotion to the interests of the General Hospital, as one of its servants for thirty-three years, by friends and colleagues, who, in further recognition of his worth and their esteem, have presented his portrait to the governors of the hospital." It is not allowed to many professional men to retire with honours of such a substantial kind as these, in addition to "all that should accompany age," and in thus recognising the work and merits of so many years' association, a just tribute has been paid, which speaks well for the good feeling and cordiality which exist among those connected with this time-honoured institution.

BIRMINGHAM WATER-SUPPLY.

On the 28th ult. a new storage reservoir at Shustoke, belonging to the Corporation, was opened by the Mayor amid much *éclat*. The work, which has occupied two years, is of great extent and perfection. It adds a storage of 400 million gallons to that already existing, thus bringing the total capacity to 607 millions. This storage would enable the water department, in a time of drought, to dispense 14,000,000 gallons of water daily for 100 days. When it is also known that the works are most complete, the machinery of the best and most modern kind, the management most efficient, it will be recognised that the water-supply of this large town is second to none in the kingdom.

LOCAL RAILWAY CASE.

An important case was decided at the recent Staffordshire Assizes in which a number of local medical men were engaged. The theory of "spinal irritation" and the usual conflicting evidence of the professional men engaged on either side afforded abundant ground for criticism, which was freely taken advantage of by the coroner employed, and failed to raise the value of expert evidence in the trials of such causes. The spectacle of "friends and colleagues" diametrically opposed to each other in opinions does not tend to increase the respect to be paid to medical evidence in courts of law, and lamentably exposes the weaknesses of testimony when riddled by shrewd advocates in the public light of day.

THE EYE HOSPITAL.

The buildings of the new hospital are rapidly approaching completion, and will give much relief when occupied to the strained resources of the present building. It is doubtful if the best advantage has been made of the space at the disposal of the architect, and it is evident that there has been no room allowed for future growth. On this point future comment may be advantageously employed, and, if not too late, many alterations may be carried out with good effect to the utility of the hospital. Already the Wolverhampton Eye Infirmary has made a good start in competition, and in the second annual meeting of the subscribers, held on the 30th ult., it was shown that there had been 2600 cases treated there in the year; with the statement that cases were constantly refused admission, it will be seen that a formidable rival is extending its arms in close proximity to the older charity, and necessitating the best of arrangements to effectually prove its greater claim to support.

SMALL-POX.

In the absence of compulsory notification of diseases of an infectious kind, the authorities have a difficulty in isolating cases and adopting proper precautionary measures. That the disease has spread and is increasing its area is undoubted. It is a matter of much regret that private influences should deter both medical men and householders from making known these cases at the outset; by thus doing they baulk the valuable aid which the medical officer of health is always willing and most able to give, and in which he is always amply supported by an energetic and strong health committee. There is no want of means, but causes over which they have no control oblige the commitee to learn of the additional cases only after they have been in existence for some time. Stamping out, the only effectual remedy in such instances, is thus rendered of little avail, and is a serious detriment to the community at large.

SCOTTISH NOTES.

(*From our own Correspondent.*)

PROFESSOR COSSAR EWART and Sir James Gibson Maitland have started upon a dredging expedition in the Moray Firth in connexion with investigations to be made by a committee of the Fishery Board for Scotland. The gunboat *Jackal* has been placed at the disposal of the Board by the Admiralty. The questions which will more especially engage the attention of these observers have reference to the habits of the herring.

I see it reported that Dr. Campbell, member for Glasgow and Aberdeen Universities, has paired till the end of the session. This is surely a mistake, as it is quite inconceivable that Dr. Campbell would absent himself from the House before the destiny of the Medical Bill is determined, and in view of Mr. Gladstone's announcement.

THE NORTHERN SCIENTIFIC SOCIETIES AT BANFF.

The third annual meeting of representatives from the various scientific and literary societies in the North of Scotland was held on Friday and Saturday of last week, at Banff. About fourteen societies, mostly of the northern counties, sent members, and a large turn-out was the consequence. Various objects and places of historical and geological interest were visited, as well as the admirable local collection in the museum, and on Friday evening several papers of scientific interest were discussed. The meeting proved of widespread interest in natural history, and such papers as those on "The Flora of Banff and Neighbourhood" and "The Flora and Fauna of the Parish of Keig" show a life-long study of science as a recreation. A committee was appointed to determine upon the place of meeting for next year.

UNIVERSITY COLLEGE, DUNDEE.

The professors and council of this college have so far arranged regarding the work to be carried on that their first calendar has now been published. From this little book it is evident that should failure arise the fault will not lie in the unwillingness of the teachers to make strenuous effort. In each of the classes the syllabus indicates a very full course, and the practical work is so incorporated with the theoretic teaching as to induce every student to gain the full acquaintance with his subjects, only to be made in the laboratory. In natural philosophy, engineering, and chemistry every opportunity is offered for such practical work, and even in English literature class-room exercises and students' criticisms will form such a feature as to remind one of the demonstrations in natural science. The college will be opened early in October, and the winter session will end in March. The summer session will run from April to the middle of June. All classes are open, under certain regulations to both sexes; but no student will be admitted under fifteen years of age, and those under sixteen must pass an entrance examination. Evening classes will form an important feature in the work of the college. The very handsome endowment fund, amounting to £100,000, enables all the exceptional advantages of this institution to be offered for fees probably smaller than in any other college in the kingdom, mathematics, English literature, and chemistry being taught for £2 2*s.*, classics and natural philosophy for £1 11*s.* 6d. The low-class fees at our various Scottish universities have had much to do with their enormous success in attracting students, and it seems the limit downwards has not yet been reached. The only class as yet available at Dundee for medical students is chemistry, which will also qualify for the B.Sc. and Public Health examinations, but as this alone will not constitute an *annus medicus*, it will be but little taken advantage of.

THE ABERDEEN POISONING CASE.

The salicylate of soda "poisoning case" at Aberdeen has been arranged, the chemist who dispensed the drug having agreed to pay the widow of the deceased £400 instead of the £750 claimed. The only point of peculiar medical interest unfortunately remains unsolved, as it has not been shown either what admixture the drug had received, or how the poison found its way into the powder. The symptoms were those of narcotic poisoning, but the fatal ingredient has not been publicly named, if ascertained. Pursuer's counsel stated in court on Saturday last that the medical man for the Crown had reported the drug to be salicylate of soda, but that his examination had been incomplete, as no search had been made for a narcotic. Medically, the case has not ended happily; probably because the full evidence has not been forthcoming.

WEST LONDON HOSPITAL.—The new wing of this hospital, in the Hammersmith-road, was opened by the Duchess of Teck on the 4th inst. The total cost of the addition is estimated at £5200, and £600 for furnishing. One of the new wards is to be devoted to children, and is to contain about thirty cots, a second to male surgical, and a third to female surgical, cases.

IRELAND.

(From our own Correspondent.)

STATE HONOURS TO THE MEDICAL PROFESSION IN IRELAND.

THE slight which the medical profession in Ireland has received through the hands of Mr. Gladstone is one which has caused considerable irritation and annoyance, and these feelings are far from being allayed by the reply given by the Prime Minister to Colonel King-Harman. The "insult" or "blunder," as it has been happily termed, is still the topic of the hour, and great regret is expressed that Sir George Porter should have accepted the so-called honour of knighthood. The action of the Government seems to members of the profession here a most unwise proceeding. When the question was this week ventilated in the House of Commons by Colonel King-Harman, Mr. Gladstone's reply appeared to them most ambiguous and misleading.

ROYAL UNIVERSITY OF IRELAND.

The Senate will shortly elect eight Medical Fellows, who will act as examiners at the examinations of the university. Of the eight Fellowships, five will be in Anatomy and Physiology, two in Surgery, and one in Medicine. The emoluments of these appointments will be £100 per annum each, and their tenure seven years. The election will be by open voting, and will take place some time in October.

UNION OFFICERS' SUPERANNUATION (IRELAND) BILL.

This Bill has passed a second reading, and, in the interests of Poor-law medical officers, it is desirable that it shall become law before the present session terminates. As all are aware, it provides that the medical and other Poor-law officers of unions shall receive such retiring allowances as their length of years in the service entitles them to, and render their superannuation a matter of right as well as of justice, so that they will be independent of the political and religious feelings of boards of guardians, which usually sway those bodies in determining the superannuation of their officers. The Local Government Board need not sanction a pension to an officer, although passed by a resolution of a board of guardians, should circumstances require such a procedure; but should they refuse without just cause, the matter can be brought under the cognisance of Parliament and be rectified. The Poor-law medical officers in Ireland are a hard-worked class of officers; they thoroughly earn the salaries they receive, their duties being most arduous, and the remuneration attached to their appointments extremely inadequate.

THE QUEEN'S COLLEGES.

A petition has been presented by certain undergraduates of the Royal University of Ireland to the House of Commons, praying that the prize funds of the Queen's Colleges may be handed over to the Royal University in order that the petitioners may have a share of them. The petition is a most objectionable one and made in very bad taste, and is only one of a series of attacks made on the Queen's Colleges in Ireland by its enemies. It has been well remarked, in reference to the petition above referred to, Are the authorities of Maynooth College on their part prepared to allow the students of the Queen's or other colleges to participate, without exacting religious tests, in the benefits exclusively derived by the students of Maynooth College from the £400,000 given to that institution out of the spoils of the Established Church of Ireland? In both cases equally the money belongs to the State; and, further, the prayer of the memorial is unfair, inasmuch as it asks that the Queen's Colleges alone are to be despoiled of their prizes, except such as they win in the Royal University, while all the remaining institutions that send candidates to the University are to be left their own particular funds, in addition to what they can obtain from the Royal University of Ireland.

EPIDEMIC DISEASES PREVENTION BILL.

A Bill has been introduced by Messrs. Gray, Brooks, and Dawson, the object of which is to make better arrangements for the prevention of outbreaks of formidable epidemic, endemic, or infectious diseases, and to amend the Public Health Act Ireland, 1878, and the Act of 1875 in England. It proposes regulations during an epidemic for the speedy

interment of the dead, for house-to-house visitation, for medical aid and hospital accommodation, for the promotion of cleansing, ventilation, and disinfection, and for guarding against the spread of disease. Loans of money for such purposes may be made without any preliminary notice or inquiry, if it appears to the Local Government Board desirable, in order to the prompt and effective execution of such regulations.

CORK OPHTHALMIC HOSPITAL.

An Alpine Village Bazaar and Fancy Fair was held last week in aid of the funds of the Cork Ophthalmic and Aural Hospital, and a considerable amount was obtained for a deserving institution. The object of the bazaar was to raise a sum of £300 to clear off the cost of erecting two new wards to the hospital. Her Royal Highness the Duchess of Connaught, among others, sent a donation to the bazaar fund.

The Cork guardians have passed a resolution requesting the medical officers of the workhouse to suggest some plan for the arrangement of the inmates of the house that will prevent the overcrowding which at present exists in the female lunatic ward.

It has been decided by the Managing Committee of the Meath Hospital, Dublin, to put this institution in communication with the Telephone Exchange.

PARIS.

(From our Paris Correspondent.)

DEATH OF M. PARROT.

I REGRET to report the death of Dr. Parrot, which took place on Sunday, the 5th instant, after an illness of two months from pulmonary disease. Dr. Parrot took his degree in 1857, was promoted to agrégé in 1860, and appointed Professor of the History of Medicine in 1876. He was also Member of the Academy of Medicine and Physician to the Asylum of the "Enfants Assistés." His body was removed to Excideuil in the department of Dordogne, his birth-place.

M. PASTEUR ON THE ETIOLOGY OF CHOLERA.

M. Pasteur having been solicited to lay before the public the instructions he had given the members of the scientific mission to Egypt to investigate the nature of cholera, now raging in that country, and which was noticed in your annotation of last week, has generously complied with the expressed desire of his friends. M. Pasteur prefaced his instructions (of which I send you an abstract copy) by remarking that the precautions hereinafter enumerated relate to those cases where the causes of contagion will be found to prevail in their maximum intensity. These precautions, he added, are instituted under the hypothesis, which he considers very probable, if not certain, that cholera does not enter the human organism by the air passages, but that it does so only by the digestive canal, unless under very exceptional circumstances:—1. Not to make use of the drinking water of the locality in which the mission will be located without having previously boiled the water, and shaken it well, after it has become cold, for two or three minutes, in a bottle half filled; or the water may be put into vessels previously heated, "vases flambés,"—that is to say, vessels that had been subjected to air heated to about 150° C. or even more, the higher the temperature the better. The natural mineral waters may be employed with advantage instead. 2. Make use of wine that has been heated in bottles to from 55° to 60° C., and which should be drunk in glasses also previously heated. 3. To make use of alimentary substances only after being well cooked, and fruits in their natural state, but previously washed with water that had been boiled, and preserved in the same vessels in which it was boiled, or had been transferred into those previously heated. 4. To make use of bread cut up into thin slices and submitted to a temperature of about 150° C., during twenty minutes or more. 5. All the vessels employed for alimentary purposes should also be previously subjected to a temperature of 150° C. or more. The bed linen and towels should be plunged into boiling water, and then dried. 7. The water for washing or bathing should be previously boiled, and, after being cooled, mixed with solutions of thymic or of carbolic acid, the former in the proportion of 1 to 500 parts, and the latter 1 to 50 parts. 8. The hands and face should be washed frequently during the day with boiled water, and to which should be added solutions of thymic and carbolic acid. 9. It is only in cases where the bodies of patients who have died from cholera or their soiled linen has to be handled that it would be necessary to cover the mouth and nostrils with a small mask formed of two pieces of thin plates of metal, enclosing between them a little cotton-wool of not more than 1 centimetre thick, the mask having been submitted to 150° C. only, and renewing the temperature of 150° on each fresh exposure to contagion.

COUNT DE CHAMBORD.

The state of health of the Count de Chambord has much improved lately. The dyspeptic symptoms have almost disappeared, but the great debility which persists still causes some anxiety.

Paris, Aug. 7th, 1883.

THE CHOLERA IN EGYPT.

(From our Correspondent.)

CHOLERA goes on increasing, not only in the rate of mortality, but in the extent of the area attacked. Having reached Cairo it has spread further southwards to villages situated on the banks of the river, and it has attacked nearly every place in the delta, the north-west part of which enjoys almost complete immunity even yet.

Cholera began in Cairo on the 15th July, and reached its maximum on the 23rd July, when 558 deaths were officially notified; the total mortality there has been 4330, the report for yesterday allowing 380 deaths. The total mortality in Egypt from cholera up to date exceeds 10,000 according to official report, and it is notorious that the deaths considerably exceed that figure.

In Alexandria we have had a few cases within the last few days, chiefly in refugees from Cairo, &c. At present we have two cases in the English hospital, both are improving. One was an engine-driver on the Cairo railway. He left Alexandria on the 24th July, was in Cairo four days, and came here on the 28th in the afternoon. A few hours after arrival he was seized with vomiting, diarrhœa, and cramps in the calves. He came to hospital on the 29th, twenty hours after the attack began. He had clear vomiting, rice-water stools, with pale countenance, eyes sunken, hands cold, temperature 95·5° F., suppression of urine, and foul and cold tongue. He was ordered an injection of a quarter of a grain of morphia hypodermically, and half a grain of calomel every half hour. In the evening the vomiting ceased, and he was purged only three times. He got teaspoonfuls of brandy to help reaction. That morning he was much better; temperature normal, no vomiting, slight purging of a slightly bilious character, and he passed during the day about four ounces of urine, about one-eighth part albuminous. He has been taking wine, milk, and beef extract since, and seems fairly on the way to recovery. The other case is an Armenian, but the reaction is violent, the temperature unequally distributed, and head symptoms are threatened; urine half albumen. There were four deaths from cholera in the native hospital last night, and a few cases remaining, while the Greek and the European hospitals have each two cases under treatment.

Our soldiers at Cairo have lost more than forty of their number since they were distributed among Suez, Heluan, &c., and I hear with great regret that a surgeon has been attacked.

The volume of the Nile is daily increasing, at an earlier period than usual, and an inundation is expected by some, which, probably, would be a godsend. I enclose an analysis of the Damietta water by a chemical expert. It contains (1) a normal amount of mineral matter, 0·270 grammes per litre; (2) a large quantity of organic material, 0·210 grammes per litre, probably of animal origin, and there is also present free ammonia; (3) materials in putrefaction; (4) infusoria of the class of vibriones, and vegetable deposits.

Surgeon-General Hunter is in Cairo; the only report we have of him appears in our local English journal, which reports him to have said that cholera was due to accumulation of filth, &c., and that the cordon round Alexandria is useless. The object of the cordon was not to keep away cholera, because people who had business here are allowed to come

from Cairo, but to prevent hordes of poor people from coming to a place where there is no room for them.

Whether Alexandria will extensively suffer, time has not yet decided. In 1865 the epidemic broke out here on June 10th, was at its maximum on July 3rd, when 228 died, and had all but vanished on July 31st. But it is dangerous to speculate or draw deductions in the case of cholera; and as we do not know it is best not to prophesy. In 1865 the mortality from cholera in Alexandria was 3992; as yet it has killed about one dozen.

Alexandria, July 31st, 1883.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

AT an ordinary meeting of the Council, held on Thursday last, the Honorary Gold Medal of the College was unanimously awarded to Mr. Richard Owen, C.B., F.R.C.S., F.R.S., in recognition of his very numerous and important contributions to biological science, and of the valuable services which he rendered to the College while he was Conservator of the Museum and Professor of Anatomy. The motion of which Mr. Erichsen had given notice was carried *nem. con.*—namely, "That it be referred to the Committee on the mode of voting for election to the Council to consider generally the charters and bye-laws of the College, and to report to the Council whether in their opinion it is desirable that any, and if so what, alterations should be made therein."

MEDICAL NOTES IN PARLIAMENT.

IN the House of Lords on Friday, Lord Shaftesbury called attention to the cruelties practised in the training of juvenile acrobats, and Lord Carlingford promised to inquire into the allegation that children are sometimes apprenticed to this trade from workhouses.

On Monday, the Trial of Lunatics Bill was read a second time. Lord Forbes called attention to the drainage of London, and remarked that no system by which sewage was allowed to flow into a tidal river could be regarded as satisfactory.

In the House of Commons on Thursday, the 2nd instant, the twenty-fifth report of the Board of Superintendence of Dublin Hospitals was presented.

The Scotch Lunacy Board.

In Committee of Supply, Dr. Webster moved to reduce by £2800 the vote for the Lunacy Commission in Scotland, on the ground that the number of commissioners and assistant commissioners was excessive and their remuneration too high. Mr. Ramsay, Mr. Cochran-Patrick, Mr. Buchanan, and Mr. Dalrymple defended the Commission, and expressed their opinion that the system was efficient and not extravagant. The Solicitor-General for Scotland observed that when the new Scotch Local Government Board was constituted it would be one of its duties to look into the matter. The amendment was withdrawn.

Dr. Cameron complained of the excessive expenses charged to criminal lunatics on their recovery, and asked the attention of the Solicitor-General to this point. The same hon. member, on the vote for the Board of Supervision, complained that in some respects public vaccinators in Scotland were illiberally treated.

On the English vote relating to the Court of Chancery, Mr. M. Scott criticised the system of inspection of Chancery lunatics as expensive and insufficient. Mr. Hibbert admitted that in some years more money was received in fees than was needed, but explained that in other years there was no balance.

The Diseases Prevention Bill.

Sir C. Dilke brought in a Bill to make better provision as regards the metropolis for the isolation and treatment of persons suffering from cholera or other infectious disease. The right hon. baronet explained that the central body empowered by the Bill would be the Asylums Board. The general health of the country was satisfactory, but in London there was a large mortality from diarrhœa among young children. It was desirable to take special precautions, as the danger of cholera would not be passed for about six weeks.—The Bill passed all its stages unopposed, and was read a third time on Tuesday night, when Sir C. Dilke stated that the Local Government Board were about to establish official relations with the Asylums Board, beginning in a day or two.

In reply to Dr. Farquharson, Sir A. Hayter read the latest telegrams from Egypt, and said there was reason to hope that the cholera had reached its penultimate stage.

The Contagious Diseases Acts.

Lord Hartington, replying to Mr. Hopwood, stated that the number of cases of venereal disease in the military hospitals at Plymouth and Devonport was 183 during the last ten weeks out of a force of 2859, as compared with 116 out of a force of 2457 during the corresponding period of last year. The naval patients on July 21st numbered 121 out of a force of 7309, as against 47 out of 7334 on the same day last year.

Disinfection of Cargoes.

Sir C. Dilke informed Mr. Brinton that the Local Government Board had issued orders with respect to the importation of rags from the East; but, in the opinion of the medical advisers of the Board, it was unnecessary to require the disinfection of wools, carpets, and rugs.

Temporary Hospitals.

Mr. Trevelyan, in reply to Colonel Nolan, said he was not aware that any sanitary authority possessed a portable hospital which could be lent to the sanitary authority of another district in case of an outbreak of cholera; but every sanitary authority had power to provide a temporary hospital for the use of its own district.

On Monday, Colonel Nolan brought in a Bill, which was read a first time, to enable sanitary authorities in Ireland to take possession of land for the erection of temporary cholera hospitals.—Lord Hartington stated to Mr. Gourley that hospital-ships were not available at a day's notice, and if they were they would be inappropriate for cholera patients amongst the troops in Egypt.—Mr. Campbell Bannerman replied to the same hon. member, that it was not intended to follow the example of the German Government in attaching hospital-ships to cruising squadrons in time of peace. During war, such ships would be prepared for service according to the circumstances and requirements of the war

Juvenile Brain Disease.

Mr. Leighton inquired whether during the last ten years there had been a material increase of brain disease and lunacy amongst school children and teachers. Mr. Mundella said the Lunacy Commissioners informed him that the children sent to the asylums were usually idiots, and it was only occasionally an insane child was met with. Instead of increasing, the number of children admitted had decreased from 306 in 1876 to 286 in 1882. As to teachers, there was a lower proportion of that class who became insane than of almost any other profession. Out of 746 incapacitated since 1875, only 24 were returned as suffering from brain affections in any form. In reply to further questions designed to prevent injurious "cramming," Mr. Mundella supported the action of school managers in requiring home lessons, and assured hon. members that the existing rules provided against pressing forward for examination children in delicate health.

London Water.

On Friday, Mr. Russell informed Mr. T. Egerton that the Local Government Board were aware of the vicinity of a contractor's dust-yard to the filter-beds of the Southwark Water Company, and had a report upon the subject presented to Parliament in 1872; but they had no power to require either the company or the contractor to discontinue the use of the filter-beds or of the dust-yard. They would, however, again call the attention of the Company to the subject.

On Monday, Sir C. Dilke stated to Mr. Broadhurst that the constant supply services were about a third of the total of 653,000 services to houses of the London Water Companies. The Local Government Board could not compel the Metropolitan Board of Works to exercise its powers in order to secure a constant supply throughout the whole of the services.—Sir J. McGare Hogg, as chairman of the Metropolitan Board, informed the hon. member that the Board would not exercise its powers because the regulations which would then be imposed upon houseowners were unneces-

sarily expensive and harassing.—In answer to Mr. Firth, Sir C. Dilke made a lengthy statement on the improvement of the measures taken to prevent pollution of the London water-supply. He explained that the alarming reference to sewage pollution which was contained in an article in the *Nineteenth Century* was not made on the authority of Professor Edward Frankland, the analyst to the Local Government Board, but on that of another gentleman of the same name, Mr. Percy Faraday Frankland. Having quoted Professor Frankland's June report, Sir C. Dilke added, that the danger which was at the present time most to be feared was due to uncleansed cisterns. On the suggestion of Colonel Bolton, the water examiner, the companies were about to issue a circular of warning to householders on this subject.

Irish Sanitary Authorities.

Mr. Trevelyan informed Mr. Gray that the number of sanitary authorities in Ireland was 223, of whom thirty-three had adopted bye-laws under the Public Health Act. Boards of Guardians were at present entrusted with the duty of making provision for special hospital accommodation, but it would be better and more convenient in some of the large towns if the same powers were given to the urban sanitary authorities—viz., the corporations and town commissioners.

Vaccine Lymph.

Mr. G. Russell, in answer to Mr. A. O'Connor, said Government had nothing to do with any lymph but that which it supplied from its own establishment. This was of two kinds: the one collected from children's arms by approved vaccinators in various parts of the country and examined at the Board's offices; the other cultivated from calf to calf at the Board's station at Lamb's-conduit-street. These were known as the humanised lymph and the animal lymph (of the establishment) respectively.—Mr. A. O'Connor asked whether the Government declined to guarantee any kind of lymph used by its officers, and whether parents had a right to be informed as to the origin of the particular lymph used. —Mr. G. Russell said he thought he had made it clear that the Government did its best to secure that that which it supplied should be free from suspicion. (Mr. A. O'Connor: It does not guarantee it.) He did not see that there could be any more positive guarantee. The notice of the question only appeared on the paper that morning, but if the hon. member desired further particulars, he would do his best to supply them.

Medical Baronetcies.

In reply to a question by Col. King-Harman as to the recent distribution of honours, Mr. Gladstone said it was true that two distinguished members of the medical profession in England had been made baronets, whilst a distinguished member of the profession in Ireland had received the simple honour of knighthood. But he objected to regarding the medical profession as other than one in the three kingdoms, and he reminded the House of the intention in the Medical Bill to make it one in standard and authority. In honouring members of the profession the question of nationality was of secondary importance. He advised Her Majesty after consultation with the heads of the medical and surgical branches of the profession; and two Irish medical men of very high position had written to him expressing their regret that there had been any indication of discontent.

Pigeon-shooting.

On Wednesday, the Cruelty to Animals Acts Amendment Bill, which prohibits the shooting of tame pigeons, passed through Committee without amendment, and was read a third time.

The Medical Bill.

In reply to Sir Trevor Lawrence, Mr. Gladstone said it was undoubtedly the intention of the Government to proceed with the Medical Bill; but as it had passed the Lords, it had been delayed in this House in favour of Bills which had not passed either House.

An Irish Workhouse Question.

In the Commons on Tuesday, Mr. Trevelyan stated that the Irish Local Government Board disapproved of the recent suspension by the guardians of the medical officer of the Old-castle Union, County Meath, and after a sworn inquiry into the charges against him had decided to retain him at his post. Probably he committed an error of judgment in employing as infirmary attendant a woman whom the guardians had directed should be placed in the ward for women of bad character, but he disclaimed any intention to be disrespectful to the guardians; and the woman was specially useful as a trained midwife. The facts would not justify the dismissal of an officer who had served efficiently for over thirty-three years; and the guardians misused their power of suspension.

Typhus Fever in Skye.

Dr. Cameron gave notice that on Monday he will ask the Lord Advocate whether his attention has been called to the reported outbreak of typhus fever in the island of Skye; if he can state how many cases of the disease have occurred, and whether it is true that the medical officer of the district has been attacked; and what steps the Local Sanitary Authority or the Board of Supervision has taken to deal with the outbreak.

Lunacy Questions.

On Thursday, Mr. Leighton reverted to the subject of lunacy amongst school children, and Mr. Mundella repeated his assurance that the increased number of children admitted to asylums was mainly due to the better provision now made for idiots and imbeciles; and that he was carefully watching the operation of the new code with a view to preventing over-pressure in schools.

Mr. Hibbert promised Mr. Corbet to endeavour to expedite the publication of the English Lunacy Commissioners' Report, which was now in the hands of the printers. The Scotch Commissioners informed him that their report would be ready in the course of a few days.

Irish Police Surgeoncies.

Mr. Trevelyan, replying to questions by Dr. Lyons and Mr. Leamy, said that the appointment of surgeons to the Irish constabulary rested with the Inspector-General of that force. When he had time, he meant to inquire into the method by which these appointments were made; and he should be glad to know the general view on the subject. There was a departmental rule that dispensary surgeons should have preference for these appointments; but exceptions were sometimes made, as in a recent case at Waterford.

Medical News.

UNIVERSITY OF LONDON.—The following candidates have passed the recent Preliminary Scientific (M.B.) Examination:—

FIRST DIVISION.

Ashe, Evelyn Oliver, Owens College.
*Ashworth, Percy, Owens College.
Barlow, George, Owens College.
*Black, George, Guy's Hospital.
Calvert, John Telfer, Owens College and St. Thomas's Hospital.
*Campbell, Henry Johnstone, Guy's Hospital and private tuition.
Chitty, John Shaw Willes, Charing-cross Hospital.
Cuff, Herbert Edmund, Guy's Hospital.
Fernau, Charles Hermann, University College.
Jordan, Walter Ross, Queen's College and King Edward's High School, Birmingham.
Rennie, George Edward, B.A. Sydney, University College.
Roberts, John Lloyd, Guy's Hospital.
Sadler, Ernest Alfred, Mason College, Birmingham.
Sawyer, Ramon Alexander, Guy's Hospital.
Smith, Thomas Wilson (Z), Guy's Hospital.
Starling, Ernest Henry, Guy's Hospital.
Williams, John Price, Owens College.
Williams, William Griffith, Owens College.
Wood, Frank Lomax, Owens College.

SECOND DIVISION.

Adamson, Horatio George, St. Bartholomew's Hospital.
Alcock, Richard, Owens College.
Andrews, Launcelot William (Ch.), St. Bartholomew's Hospital.
Bahadhurji, Kaikhosro Nasarvanji, University College.
*Baine, Laurence Augustus, Mason College and College of Physical Science, Newcastle-on-Tyne.
Baker, Robert William, University College.
Bannister, Marmaduke, Owens College.
Barclay, Wilfred Martin, Bristol Medical School.
Baxendell, Arthur, Owens College.
Bays, James Thomas, University College and private study.
Berry, George Arthur, Owens College.
*Blake, James Edward Huxley, Mason College, Birmingham.
Boyce, Rupert William, University College.
Brindley, Albert Edward, Owens College.
Brook, William Frederick, St. Thomas's Hospital and private study and tuition.
Brownlow, George Percy, St. Bartholomew's Hospital.
Bryett, Lewis Thomas Fraser, King's College.
Bueno de Mesquita, Solomon, Guy's Hospital.
Buist, James Joseph, (Z). St. Bartholomew's Hospital.
Burt, Cyril Cecil Barrow, Westminster Hospital.

Carter, Robert James, King's College.
Cass, Arthur Morgan, Owens College.
Chaster, George William, University College, Liverpool.
Clark, Francis William, Middlesex Hospital.
Colman, Walter Stacy, University of Edinburgh and private study.
Cooke, Cecil Whitehall, St. Thomas's Hospital.
*Cribb, Cecil Howard, University College and Royal School of Mines.
Cunningham, John, Royal Infirmary School of Medicine, Liverpool.
Deanesly, Edward, University College.
De Jong, Edward Meyer, Owens College.
*Duer, Charles, University College.
*Durham, Arthur Ellis, University College.
Dyer, John Edward, University College.
Edmonds, Henry Augustus (Z), Guy's Hospital.
Fawssett, Frank, St. Thomas's Hospital.
*Gardiner, John, Owens College.
Gault, Arthur Henry, Owens College.
Gifford, George Taylor, King's College.
*Gould, John Edwin, University College.
Grayfoot, Blenman Buhot, University of Edinburgh.
Grierson, George Frederick, Owens College.
*Hastings, Edwin Birchall, University College.
Hebblethwaite, Harold, Leeds School of Medicine and Yorkshire College.
Hensley, Philip Henry, King's College.
Holder, Sydney Ernest, University College.
Johnson, Harold, St. Bartholomew's Hospital and private study.
Johnston, Charles Saint, Mason College, Birmingham.
Jones, David Thomas (B), University College of Wales.
*Jones, Herbert Saunders Wansbrough, New Kingswood School.
Kelsall, Henry Truman, London Hospital.
Kingsford, Arthur Beresford, University College.
Leche, Arthur, University College, Bristol.
Ledward, Milton Prentice, Owens College.
Lightbody, John Henry, Royal Infirmary School of Medicine and University College, Liverpool.
Mackenzie, William Kenneth, King's College.
Mair, Ludovic William Darra, Epsom College.
Morgan, Morgan John, University College of Wales.
Moss, Enoch, Guy's Hospital.
Oliver, Charles Pye, Charing-cross Hospital.
Ord, William Theophilus, Bristol Medical School and private study and tuition.
Padbury, George John, Guy's Hospital.
Parker, George Dines (Ph.), University College of Wales.
Parkinson, John Porter, University College.
Posnett, Edward, (Ph.), Yorkshire College, Leeds.
Powell, Llewelyn William, University College.
Randall, Philip Nicholas, Guy's Hospital.
Rivers, William Halse Rivers, St. Bartholomew's Hospital.
Rossall, Joseph Crofts, St. Mary's Hospital and private tuition.
Royce, Mary, University College and private study.
Sarjant, Frank Percy, Guy's Hospital.
Savery, Frank, University College.
Smith, Guy Bellingham, University College.
Smyth, Nugent Edward, Mason College, Birmingham.
Snell, Ernest Hugh, Mason College, Birmingham.
Sutherland, G. Whitefield, B.A. Sydney, University of Edinburgh and University College.
Symonds, Henry, St. Bartholomew's Hospital.
Taylor, Frederick Howard, London Hospital and private study.
Tidey, Stuart Alexander, St. Mary's Hospital and private tuition.
Tonking, John Herbert, St. Thomas's Hospital.
Tresidder, William Elliot, Guy's Hospital.
Tubby, Alfred Herbert, Guy's Hospital.
Tuckett, Edward Hamilton, University College, Bristol, and private study.
Upham, Charles Hazlitt, private study.
Vaughan, Alfred Ellis, Owens College.
Vincent, Herbert Edmund, Guy's Hospital.
Ward, Ernest (Ph.), Bristol Medical School.
Ward, Howard Percy, Felsted School and King's College.
*Whitehead, Henry Edward, St. Bartholomew's Hospital.
Wood, Frank Stanley, Guy's Hospital.
Wood, John Edwin, B.A. (Ch.), Yorkshire College, Leeds.

EXPERIMENTAL PHYSICS ONLY.

Aveline, Henry Talbot Sidney, private study.
Holloway, Samuel Frederick, Guys Hospital.
Spreat, Frank Arthur, St. Bartholomew's Hospital and private tuition.
Stacy, John Herbert, private study.
Stephens, Richard John, King's College.

BOTANY ONLY.

Brennan, Joseph Richard Mary, Owens College.

ZOOLOGY ONLY.

Bidwell, Leonard Arthur, St. Thomas's Hospital.

* These candidates have also passed in the Mathematics of the Intermediate Examination in Science, and have thus become admissible to the B.Sc. Examination.
(Ch.) Postponed examination in Chemistry.
(Ph.) Postponed examination in Physics.
(B.) Postponed examination in Botany.
(Z.) Postponed examination in Zoology.

UNIVERSITY OF GLASGOW.—The following degrees have been recently conferred in the Faculty of Medicine:—

DOCTORS OF MEDICINE.

Allan, George Richard, B.A., M.B., England.
Campbell, Angus, M.B., Scotland.
Caskie, Wm. Alexander, M.A., M.B., Scotland.
Couper, David, M.B., Scotland.
Denholm, Andrew, M.B., Scotland.
Highet, John, M.B., Scotland.
Howie, Thomas Ballantyne, M.B., Scotland.
*Inglis, David Wood, M.A., M.B., Scotland.
*Newman, David, M.B., Scotland.
Ochiltree, Edward Graham, M.B., Australia.
Prichard, Richard, M.B., Wales.
Stewart, Charles William, M.A., M.B., Scotland.
Wilson, James Mitchell, M.B., Scotland.
Yair, John M., M.B., Scotland.

BACHELORS OF MEDICINE AND MASTERS IN SURGERY.

Adam, William T.,	Scotland.	Kerr, John,	Scotland.
Aitken, Wm. B.,	,,	Lawson, James B.,	,,
Alexander, Samuel,	Ireland.	‖Little, William,	England.
Alexander, Thomas G.,	Scotland.	Logan, John,	Scotland.
Arthur, David,	,,	Martin, William,	,,
Beveridge, Robert E.,	,,	M'Gregor, John F.,	,,
Binnie, Robert M'G.,	,,	Morison, Alexander,	,,
‖Blaine, Benjamin,	South Africa.	Morris, George A.	,,
Campbell, James J.,	Scotland.	Muir, James S.,	,,
Campbell, William,	,,	Murray, John W.	,,
Clerk, John,	,,	M'Culloch, Henry D.,	India.
§Colvin, Francis H., M.A.	,,	M'Donald, John,	Scotland.
Crawford, John C.,	,,	M'Donald, Neil C.,	,,
Davidson, Robert,	,,	Macgregor, John F.,	,,
Day, Makhan Lal,	India.	M'Kenzie, Daniel,	,,
Dickson, Alexander,	Scotland.	MacKintosh, Hugh M.,	,,
†Dunlop, J. Innes,	,,	M'Lean, Archibald,	,,
Dunlop, William.	,,	Macnaughton, J. R.,	,,
‡Forsyth, William A.,	,,	Orr, David,	,,
Fulton, George C. H.,	,,	Prangnell, John T.,	,,
Gay, Herbert M.,	England.	Prosser, Francis S.,	Wales.
§Gemmell, James F.,	Scotland.	Quaife, W. F., B.A.,	Sydney.
§Gibb, William,	,,	Richard, David T.,	Wales.
§Gibb, William F.,	,,	Robb, R. A. D.,	Scotland.
Gibson, James,	,,	Robertson, John M.,	,,
Gladhill, James,	England.	Russell, John,	,,
Gordon, William,	Scotland.	Skottowe, A. J. F.,	India.
Gourlay, Robert,	,,	Smith, David M.,	Scotland.
Hamilton, James,	,,	Soga, William A.,	S. Africa.
Hamilton, Wm. T.,	S. Africa.	Stafford, William,	England.
Hendrick, James M.,	Scotland.	Steele, Ross S.,	Scotland.
Herbertson, J. C., M.A.	,,	Stewart, Andrew,	,,
Hodge, Peter,	,,	Strain, William L.,	,,
Hogg, George M.,	England.	Vost, William,	,,
Howard, Thomas,	Scotland.	Walker, Patrick H.,	,,
Howie, Alexander,	,,	§Williams, Alfred,	England.
Hunter, Robert R.,	,,	Wilson, John C.,	Scotland.
Hutchinson, Crei't.,	Ireland.	Young, John,	,,
Johnston, Alexander,	Scotland.	Young, Robert H.,	,,
Johnston, Francis,	,,	Young, R. B., M.A.,	,,
Kenny, George G.,	India.		

* Commended for Thesis. † Honours.
‡ High Commendation. § Commendation.

BRITISH MEDICAL SERVICE.—The following is the list of the candidates for appointments as Surgeons in this Service who were successful at the competitive examination recently held at Netley:—

	Marks.		Marks.
*Bruce, D.	2975	Moore, R. R. H. ..	2000
Gordon, H. C. ..	2320	O'Shaughnessy, P. J. B.	1455
Bell, H. L.	2186	Robertson, J. R. S.	1965
Riordan, J... ..	2285	Tate, A. E.	2050
De Lom, H. A. ..	2101	Faunce, C. E.	1792
Firth, R. H.	2460	Lendrum, W. H. ..	2200
Nelis, G...	1990	Wyatt, H. J.	1613
Gallwey, P. J. ..	1699		

* Gained the Montefiore Second Prize.

INDIAN MEDICAL SERVICE.—The following is the list of the candidates for appointments in this Service who were successful at both the London and Netley examinations recently held:—

	Marks.		Marks.
†Young, J. M. ..	5680	Quicke, W. H. ..	4733
Jameson, G.	5257	Evans, A. O... ..	4691
Collie, M. A. T. ..	5225		

† Gained the Herbert Prize, Martin Memorial Gold Medal, Montefiore Medal, and Parkes Memorial Bronze Medal.

APOTHECARIES' HALL. — The following gentlemen passed the examination in the Science and Practice of Medicine, and received certificates to practise, on Aug. 2nd:—

Beard, Thomas, Bath-street, Birmingham.
Hardy, Walter Mitchell, Buttershaw, Bradford.
Hendley, Harold, West London Hospital.
Ley, Herbert, Westbourne-terrace.
Miller, Thomas Hugh, Woburn, Bedfordshire.
Pring, Arthur, Barnes.
Pullin, Bingley Gibbes, Holford-square.
Ray, Dwarka Nath, Bengal.
Stace, Arthur Frank, Bayswater.
Steedman, John Francis, St. Bartholomew's Hospital.

The following gentlemen also on the same day passed the Primary Professional Examination:—

Alfred Hugh Burns, St. Thomas's Hospital; William Hy. Kelson, St. Thomas's road; Alfred Cropley, London Hospital.

THE library of the Royal Medical and Chirurgical Society will be closed from Monday, Aug. 13th, to Wednesday, Sept. 12th, both days inclusive.

A LETTER from Dr. John Liddle, the active medical officer of health of Whitechapel, has been received by the District Board of Works, expressive of the wish of the writer, on account of failure of physical strength, to resign the office he has held so usefully for twenty-seven years.

WIGAN INFIRMARY.—The hon. secretary of the infirmary has received an intimation that a friend of the charity is desirous of erecting and furnishing, at a cost of £3000, a wing to the present buildings, with the special object of providing separate wards for severe cases and such as require isolation.

THE MILLER MEMORIAL HOSPITAL.—On the 1st inst. the foundation stone of this hospital, in connexion with the Royal Kent Dispensary, was laid by the Earl of Dartmouth. The building is to be in the circular form, as proposed by Professor Marshall, and will be the first of its kind erected in England.

DEWSBURY AND DISTRICT INFIRMARY.—The opening ceremony of this infirmary took place on the 4th inst. The building has been erected from designs by Mr. A. H. Kirk at a cost of about £17,000. Great care seems to have been taken to make the sanitary and administrative arrangements as complete as possible.

EPSOM COLLEGE.—Founder's day at the Royal Medical Benevolent College was observed on the 2nd inst. Mr. G. Cubitt, M.P., distributed the prizes to the successful pupils, and in doing so expressed his pleasure in being able, by his presence on the occasion, to testify his respect for the medical profession, with which the College was so closely identified.

A GREAT LOSS.—The new portion of the University of Indiana, Bloomington, containing the library, museum, and laboratory, has been destroyed by fire caused by lightning. The museum included a collection of fishes made by Dr. Jordan, which was regarded as the most valuable of its kind in the United States. The library contained 15,000 volumes, besides the "Owen" collection.

THE Rolleston Memorial Fund, which amounts to £1200, has been transferred to the University of Oxford, and accepted by them for the institution of a prize, to be awarded every two years, for original research in animal and vegetable morphology, physiology and pathology, and anthropology, the subject to be selected by the candidates themselves.

TROWBRIDGE COTTAGE HOSPITAL.—On the 28th ult., the foundation stone of a new cottage hospital was laid at Trowbridge. The occasion was made quite a holiday in the town, all the friendly societies in the vicinity going in procession to the site. The cost of the building, £3000, is borne by Mr. Gouldsmith, who presents the sum for the purpose, as a thanksgiving offering on his restoration to health after a dangerous illness.

ROYAL SURREY COUNTY HOSPITAL.—A special court of governors of this hospital was held last week for the purpose of considering the means of raising the funds needed to carry out certain sanitary improvements which had been found necessary. It was at first feared the sale of stock would be inevitable for the purpose, but it was announced that a benevolent individual, who wished his name to be withheld, so strongly deprecated resort to that proceeding as to offer £400 towards the cost of the proposed alterations. This offer was gratefully accepted by the governors.

NORTH OF SCOTLAND MEDICAL ASSOCIATION.—The annual meeting of this Association was held on the 4th inst., in the hall of the Society, Aberdeen. Dr. Jamieson of Peterhead, an ex-president, was called upon to preside, the president of last year, Dr. W. Pirrie, having died since the last meeting. Dr. Jamieson introduced the president for the year, Dr. Manson (Banff), who in his address remarked on the practice of medicine and surgery half a century ago, and the progress which both have made up to the present time. Dr. Struthers, in a few words, referred to the various Bills regarding the practice and pursuit of medicine which had been introduced into Parliament in the course of the year, Dr. Rodger stated that the election of president for the present year lay with the Buchan Medical Society, and at the annual meeting of that branch of the body they had unanimously agreed to nominate Professor Struthers as president for the ensuing year. The nomination was confirmed, and the members of the Society then adjourned, meeting at dinner afterwards in the Palace Hotel, where, under the presidency of Dr. Manson, a very enjoyable afternoon was spent.

PRESENTATIONS.—Mr. A. R. Turnbull, M.B. Edin., Medical Superintendent of the Fife and Kinross District Asylum, has been presented with a teapot, coffee-pot, and an inkstand, by the officers, attendants, and servants of the asylum, on the occasion of his marriage, as a token of their esteem and respect.—Dr. Thomas McClure, on the occasion of his departure from Worle, has been presented by the members of the Worle Branch of the United Patriots' Benefit Society, with a handsomely framed address, and by the members of the Rational Sick and Burial Association with a framed illuminated address and a writing-case, as evidence of the esteem in which he is held as medical attendant of the societies.

THE "RED CROSS" SMALL-POX AMBULANCE SHIP. On Wednesday afternoon the launch of the first vessel ever built in connexion with Poor-law administration took place under the auspices of the Metropolitan Asylums Board. It has been specially constructed as an ambulance small-pox steamer, and was launched from the yard of Messrs. Edwards and Symes, at Millwall, in the presence of a distinguished company. The *Red Cross* is built of iron, and is 104ft. in length by 16ft. 6in. in breadth, and 6ft. deep. She will, when completed, be fitted with eighteen ambulance berths in the fore-deck, and for convalescent small-pox patients in her after-deck. She is a paddle steamer, and under the contract is to be delivered to the Asylums Board complete in every particular, even to furniture, for a sum of £4500.

IRISH LUNATIC ASYLUMS: ANNUAL REPORT.—There were in district asylums and workhouses on the first day of the present year 13,821 lunatics, a number exceeding by 377 those of the previous year. The admissions last year amounted to 2645, and of these 19 per cent. were relapsed cases. The inspectors, in their report, refer to irregularities in committal warrants, and instance a case where a man was brought late at night by the police to an asylum, his wife deposing as to his dangerous tendencies. The resident medical superintendent admitted him, and the man brought an action against the physician for false imprisonment, who had to pay a farthing damages, and the costs of the trial, which amounted to £100. It appears also that the practice of issuing magisterial committals on the slightest pretext exists to a considerable extent, and an alteration of the law in this respect would be advisable. The mortality in district asylums in Ireland has always been extremely low and invariably below that of similar institutions in other countries. Last year it was 6 per cent. on the average number under treatment, as compared with 6¾ in 1881. Of the deaths (775) it is satisfactory to learn that not one occurred from accident, violence, or suicide.

Medical Appointments.

Intimations for this column must be sent DIRECT *to the Office of* THE LANCET *before 9 o'clock on Thursday Morning at the latest.*

CAREY, ADRIAN, M.R.C.S., has been appointed Medical Officer to the Fourth District of the Church Stretton Union.

CARR, JOHN, M.D., &c., has been appointed Medical Officer to the London and Manchester Industrial Assurance and Medical Aid Association, Southampton.

CHAMBERLAIN, E. T., L.R.C.P., &c., has been appointed Medical Officer to the London and Manchester Assurance and Medical Aid Association, Southampton.

GOLDSBRO', CHAS. FIELD, M.D. Sydney, F.R.C.P. Ed., has been appointed Consulting Surgeon to the Auckland Hospital, New Zealand.

HUNTER, JAMES, F.R.C.S.Ed., has been appointed Lecturer on Animal Physiology to the Watt Institution and School of Arts, Edinburgh.

JEPHCOTE, ROBT. WM., L.R.C.P., L.R.C.S.Ed., has been appointed Medical Officer and Public Vaccinator to the Alcester District and Workhouse of the Alcester Union, vice Martin, resigned.

KNAPTON, GEORGE, M.D., &c., has been appointed Medical Officer to the London and Manchester Industrial Assurance and Medical Aid Association, Southampton.

LYONS, ALFRED DE COURCY, M.B., M.C.Aber., has been appointed Public Vaccinator to the Yatton District of the Bedminster Union.

MELLOR, THOMAS, M.R.C.S., L.S.A.Lond., has been appointed Medical Officer to the Workhouse of the Bury Union.

MOLE, ROBERT B., L.R.C.P.Ed., M.R.C.S., has been appointed Medical Officer to the Seventh District of the Liskeard Union.

NISBETT, ROBERT INNES, M.R.C.S., L.S.A.Lond., has been appointed Consulting Surgeon to the Gravesend and Milton Infirmary and Dispensary, after holding the office of Honorary Surgeon to that Institution for upwards of sixteen years.

OCTERLONY, JOHN A., M.D., has been appointed Professor of Obstetrics and Diseases of Women and Children in the University of Louisville, U.S.A., vice Parvin, resigned.

O'MEARA, F., M.R.C.S., has been appointed Medical Officer to the Tydd St. Giles's District of the Wisbeach Union, vice Measures.

PRYN, W. W., M.R.C.S., L.S.A.Lond., has been appointed Medical Officer to the Clowance and St. John District of the Stoke Damerel Union.

SOUTER, JOHN CLEMENT, M.D., M.Ch. Aber., has been appointed Surgeon to the Gulgong Hospital, N.S.W.

STAFFORD, THOS. JOSEPH, L.K.Q.C.P.I., L.R.C.S.I., has been appointed Medical Officer to the No. 1 Dispensary District of the Boyle Union, vice Blakeney, resigned.

STEEL, WILLS D., M.D., has been appointed Medical Officer of Health to the Abergavenny Urban District; also, Medical Officer to the Abergavenny Union, and Medical Officer and Public Vaccinator to the Llanarth District.

TREVES, EDWARD, M.R.C.S., has been elected Assistant Honorary Surgeon to the Brighton, Hove, and Sussex Throat and Ear Dispensary, Queen's-road, Brighton.

WADE, A. B., M.B., &c., has been appointed Medical Officer to the London and Manchester Industrial Assurance and Medical Aid Association, Southampton.

WELCH, R., L.R.C.P., &c., has been appointed Medical Officer to the London and Manchester Industrial Assurance and Medical Aid Association, Southampton.

Births, Marriages, and Deaths.

BIRTHS.

CHAMBERS.—On the 15th ult., at Wilmington-square, W.C., the wife of E. Chambers, M.B., &c., of a daughter.

JOYNT.—On the 2nd inst., at 6, Hume-street, Dublin, the wife of H. W. Joynt, Surgeon-Major, Army Medical Department, of a son.

ROOME.—On the 6th inst., at Fluelen Villa, Guildford, the wife of Henry Abercrombie Roome, M.B., of a daughter.

THOMPSON.—On May 9th, at Salisbary, Adelaide, S. Australia, the wife of C. Emilius Thompson, M.R.C.S., &c., prematurely, of a daughter (Dorothy Maud), who survived her birth but a few hours.

YOUNG.—On the 7th inst., at Athol Villas, Redhill, the wife of David Young, M.D., of Rome, and 73, Harley-street, W., of a daughter.

MARRIAGES.

ABBOTT—SHORT.—On the 4th inst., at St. Mary's, Roxby, Lincolnshire, by the Rev. W. A. Taylor, assisted by the Rev. A. H. Powell, Charles E. Abbott, M.R.C.S.Eng., L.K.Q.C.P.I., of Bocking, Essex, to Ada Mary, eldest daughter of the late Stephen Camin Short.

COCK—HODGSON.—On the 31st ult., at Chalgrave, Leighton, Beds, John Cock, M.R.C.S., L.R.C.P., to Marian, second daughter of the Rev. J. Willoughby Hodgson, Vicar of Chalgrave.

CRITCHETT—DUNPHIE.—On the 4th inst., at the Church of Our Lady, Grove-road, George Anderson Critchett, F.R.C.S.Ed., of Harley-street, Cavendish-square, to Agnes, only daughter of Charles J. Dunphie, of King Henry's-road, Regent's-park.

DAVIES—BATCHELOR.—On the 1st inst., at the Congregational Church, Cheltenham, Francis Joseph Davies, F.R.C.S., of Abercarn, Mon., youngest son of W. J. Davies, J.P., F.R.C.S., of Penner House, near Newport, Mon., to Eleanor Batchelor, of Park Lawn, Cheltenham, second surviving daughter of the late T. B. Batchelor, of Newport, Mon.

WILLIAMS—PETER.—On the 7th inst., at St. Mary Magdalene, Launceston, by the Rev. W. W. Martyn, Rector of Lifton, assisted by the Rev. C. E. Gandy, John Terrell Williams, of Barrow-in-Furness, Surgeon, to Adeline Mary, daughter of Richard Peter, Solicitor and Town Clerk, Launceston.

DEATHS.

MCCLELLAND.—On the 31st ult., at 29, Marina, St. Leonard's-on-Sea, John McClelland, Esq., F.L.S., G.S.L.S., F.R.S.Lond., F.R.S. Ratisbon, Corresponding Member of the Royal Academy of Turin, S. Nat. Hist., Boston, of 6, Lancaster-terrace, Regent's-park, N.W., late Inspector-General of H.M. Indian Forces.

READ.—On the 4th inst., after a few days' illness, Cecilia Mary, the dearly beloved wife of Thomas Lawrence Read, of 11, Petersham-terrace, South Kensington, aged 45. R. I. P.

SOUTHAM.—On the 2nd inst., at Thorne-road, Peterborough, Thomas Southam, M.R.C.S., L.S.A.Lond., aged 74.

N.B.—*A fee of 5s. is charged for the insertion of Notices of Births, Marriages, and Deaths.*

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET OFFICE, August 9th, 1883.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radia. in Vacuo.	Max. Temp. Shade.	Min. Temp.	Rain fall.	Remarks at 8.30 A.M.
Aug. 3	30·24	N.	64	59	111	75	57	..	Hazy
,, 4	30·26	S.W.	59	58	100	75	57	..	Overcast
,, 5	30·25	W.	62	60	90	70	58	·02	Overcast
,, 6	29·93	S.W.	64	62	101	72	60	·01	Cloudy
,, 7	29·97	N.W.	61	57	112	72	55	·04	Hazy
,, 8	29·91	W.	60	54	80	63	53	..	Cloudy
,, 9	29·66	N.W.	60	56	112	67	56	0·25	Cloudy

Notes, Short Comments, and Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

All communications relating to the editorial business of the journal must be addressed "To the Editor."

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for publication or private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe, or recommend practitioners.

Local papers containing reports or news-paragraphs should be marked.

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "To the Publisher."*

ABSENT CONSULTANTS.

A CORRESPONDENT complains that he lately wasted a morning in looking for a consultant, and suggests that we should publish a list of absentees, as he does not care to be put off with any junior the footman may name. We are glad to have such proof that our hardworked brethren are taking their well-earned holiday, and we can assure our correspondent that he will find in the juniors, even if "named by the footman," men who will not lower the credit of the profession in the absence of their chiefs. We do not think that any city had ever better promise and better service from its rising physicians and surgeons than London at this moment, and it is one of the advantages of the holiday season that it brings them out.

W. L.—It is not easy to give an opinion on a case which one has not seen. Generally, if we are satisfied of the existence of a dislocation, it is best to reduce it without delay, if necessary with the help of an anæsthetic.

AMERICAN DEGREES.

To the Editor of THE LANCET.

SIR,—In an answer to a correspondent, who signs himself "H. J. J.," you state that "it is probable that the best American degrees will be registrable under the new Act." If such should be the case, it will be very unfair to those who have obtained British qualifications, for I do not think there is a single institution in America that grants degrees equal to any diploma obtained from British corporations. The most respectable degrees obtained in the United States are those granted by Harvard and Pennsylvania Universities, and Jefferson, Bellevue, and Columbia Colleges. To Harvard's credit, it must be said that it requires every medical student to pass an examination in general literature and attendance upon a course of medical instruction, embracing three winter sessions. Pennsylvania requires the same duration of study, but no preliminary examination in general education. As to the others, attendance upon two winter courses of five or six months' duration each is all that is required of candidates for degrees, with the exception of a year spent with a preceptor, who must be a regular practising physician. I understand that Harvard is contemplating extending the course to four years—an act which the sister universities and colleges might with much grace emulate. Furthermore, I am informed that the examiners are exclusively the professors in these institutions, and the number of rejected candidates is very small.

I am, Sir, your obedient servant,

A BRITISH PRACTITIONER RESIDENT IN THE STATES.

July 25th, 1883.

*** Such facts as our correspondent adduces will doubtless all be considered by the new Medical Council.—ED. L.

THE DISASTER AT CASAMICCIOLA.

PROFESSOR MICHELE STEFANO DE ROSSI, the most eminent of living Italian seismologists, is opposed to the view of Professor Palmieri, of the Vesuvius Observatory, that the disaster of Casamicciola was due to subsidence of the earth's crust from the perennial escape of sulphur honeycombing or hollowing out the subsoil. Promising a fuller scientific study when further details of the event are available, Professor de Rossi says that for several days before the 25th and 28th of July microseismic movements at Rocca di Papa on the Alban Hills corresponding with the indications of the microphone in Rome pointed to a powerful reawakening of internal telluric activity. The earthquake which happened on the 25th at Cosenza and Catanzaro seemed the maximum movement of which those indications were the prelude; but their continuance and intensification were the sure signs of a fresh dynamic effort. Of this, however, the topographic point immediately threatened could not be determined because geodynamic observatories, particularly in localities where the manifestations of the internal forces of the earth are most to be dreaded, are not yet numerous enough for the requisite induction. So by this shock at Casamicciola we could only suspect from the direction of the movements and the daily record of the facts noted here and there throughout Italy that the seismic activity was concentrated in the southern regions of the Peninsula. The bulletin of the Geodynamic Observatory, issued daily from the central office of meteorology, put all in possession of the above-mentioned observations, microseismic and seismic, of the last few days. The earthquake of Saturday evening was known to the seismographic registrars in Rome, Velletri, and Ceccano at 9 30 P.M. by very gentle undulations between N.S. and E.W. From what we can gather as to this last earthquake, it seems to have been an exact but more extensive reproduction of that of March 4th, 1881, and confirming the previsions and other data drawn from the same. Professor de Rossi had on that occasion given the salutary advice to plant seismographic observatories on Ischia and the neighbouring islands; and even in the September of last year he had, in company with Professors Denza, Stoppani, Silvestri, and Galli, geologists and meteorologists only less distinguished than himself, made special geodynamic studies on the spot with a view to putting that advice in execution. Among other measures towards the same end he had asked the superintendent of one of the principal thermal establishments of Casamicciola for a daily register of the temperature of the thermo-mineral waters and of the state of the sulphur-vents, as the temperature when it exceeds certain limits and the velocity of the sulphur escape are among the surest indications of endodynamic disturbance. To these were to have been added observations on the drying up of the wells, the direction and intensity of the subterranean borborygm and minor perceptible shocks, all of them valuable in conjunction with the delicate seismic instruments now in use and the microphone and telephone for determining the telluric vibrations. But these and similar measures were frustrated by the fear of those interested in the baths, that a geodynamic observatory at Casamicciola would scare away the bathers and ruin the establishments. So strong was this fear that Professor de Rossi says he and others were purposely kept in ignorance of many phenomena that might have led to a timely warning of such disasters as those of March 4th, 1881, and July 28th, 1883.

Notting-hill is thanked for his polite communication. The correction is made in another column.

Mr. J. Dyson.—Heath's Course of Operative Surgery, with plates, by Léveillé.

OUT-PATIENT DEPARTMENTS.

To the Editor of THE LANCET.

SIR,—This being the age of reform, why should it not be extended to hospital management, and, above all, to the out-patient department of those institutions. That people should be kept waiting from two to four hours before they see a medical man is a fact which requires attention, and why it has not before now received that attention is to me a mystery. Out-patients have as much right to consideration as in-patients, and it does not follow that because their cases are less urgent they should not receive equal consideration at the hands of the authorities. Male cases are invariably taken first—why or wherefore it is hard to conjecture, unless it is on the ground that those not actually disabled can get back to their work by two o'clock. This of course is an excellent reason, but let me ask how many male cases are as a rule finished by three o'clock. I think the answer will be not one-half. But as regards the women, why should they be kept waiting with nothing to do for hours till the men have been seen? The time for attendance is one o'clock—half-past twelve in some cases; and there they sit and wait till they are called in, which is seldom before three o'clock. Surely they could be told by a notice-board to come at 2.30 instead of 12.30. Hospital authorities may consider this a trivial matter, but should they incline to reform an undoubted evil they would confer a great boon on a large number of the poor and suffering community.

I am, Sir, yours sincerely,

July 25th, 1883. A. D.

THE PROHIBITION OF BONE-SETTERS, &c.

Meyer Dutch.—We have not seen the remark by the minister quoted in any report. There are limits to the power of Government, especially in free countries. Our correspondent overrates it if he thinks that any Government could prohibit quackery. It can and it ought to punish fraud and false representation. But to compel ignorant people, rich or poor, to consult only qualified persons would be an impracticable undertaking and very hard upon qualified men, who rely, after all, on their education and its guarantees. We believe the Government are anxious to make clear for the public good the difference between pretenders and regular practitioners.

Alex. W. Stirling, M.B.—The medical estimate of alcohol is not to be gathered from any formal set of experiments. Those of Dr. Parkes, detailed in his papers in the Royal Society's Transactions in 1867, 1870, and 1872 are of great interest and value. Our correspondent might with advantage read the medical evidence before the Lords Committee on Intemperance. Undoubtedly the drift of medical opinion is against more than a very limited amount of alcohol as food, and in the case of children of none. To take alcohol on an empty stomach, as if it were wholesome food, is a sure way to cause disease.

Mr. Shollick.—The first question it is impossible to answer definitely. In reply to the second question, we would recommend the directions of the Royal Humane Society as the best issued.

Mr. C. E. Hare.—Quain's Dictionary of Medicine, published by Longmans and Co.

Dr. A. W. Barclay's letter arrived too late for insertion this week.

Mr. J. B. Sutton.—Soon.

EXAMINERS AND CANDIDATES.

To the Editor of THE LANCET.

Sir,—This is an age of humanity, and more. Science goes delicately to-day. She would not needlessly trample on a worm—not she—without the Home Secretary's sanction. But alas, the law can do but little to curb "man's inhumanity to man"; and truly the dog which the man of science interrogates as to nature's secrets is to be envied in comparison with many a medical student subjected to the like process. Dogs must be "vivisected," we know, and doubtless on the back of the too aspiring student "the ploughers must plough." But why should the infliction of needless pain be reckoned a misdemeanour in the one case and a harmless, nay, even praiseworthy recreation in the other?

You shall hear two men in talk, candidates in the same examination, the one rejected, the other successful. How comes it that the disappointment of the former is illuminated by a mild reproach, while the triumph of his fellow is lurid with bitterness and wrath? Why, the one found himself, when the dreaded "oral" came on, in the hands of a humane examiner, who did his duty, but did it considerately; whose dignity did not need to prop itself on the ruins of the self-respect of even an unworthy candidate. But our much "congratulated" one has fallen into the clutches of the terror of the examination room; the examiner who "will plough you if he can"; who receives your well approved answer with a grunt of seeming disapproval, and greets your error with a cold, impassive sneer; who, clothed in an authority which, if brief, is all but absolute, will listen to no theories but those that he has made his own, and fleers and flouts at the views of men he can encounter any day by stepping into the open ring of public discussion—striking foul in fact. Thus he garners in the golden grain, this ruthless husbandman, but on, [illegible] the furrows where his ploughshare has gone!

The actual extent of the evil indicated can only be determined on the evidence of many witnesses, but its existence must be known to all. Its form is often modified, but always its scope seems to be free and unrestrained. It is a question of good taste, we are told, and if an examiner is not blessed with any, well, the student must suffer; there is no remedy, no appeal. The effects are pretty obvious:—1. The value of the examination as a test is impaired. "Would you truly learn what wealth the traveller hath, keep thy fingers from his throat." 2. The student suffers in his *morale*. 3. The dignity of the profession is sullied and its tone is lowered. Yet there is no remedy.

Such conduct on the part of an examiner as I have described is almost, perhaps quite, unknown to the students at universities of residence like Oxford and Cambridge. There, public opinion is concentrated, so to speak; it can be readily informed, and can make its resentment keenly felt. But here, in London, with our four examining bodies, we lose touch of one another. Opinion is diffused and attenuated. Distant "curses, not loud but deep," like thunder on another continent, are the offending examiner's sole retribution, and the mischief is unchecked.

Perhaps the new Bill, when it gathers us under its wings, may, with many another plague, banish this one too. Meantime can nothing be done? Let us, at all events, appeal to the better natures—they surely must have them—of these our natural foes. Let us plead, at least, for the amenities of civilised warfare. After all, our sternest tyrant is but flesh and blood. He may even have made a mistake—once on a time. Just to think of it! all erring mammals together! And though a sucking examiner is a thing unknown, yet even he, at whose nod we tremble, and before whose frown we quake, even he once hung——but the thought is too thrilling for the susceptibilities of even, Sir,

Your obedient servant,

University College, July 11th, 1883. A MEDICAL STUDENT.

CONCEALMENT OF BIRTH NEAR ST. BLAZEY.

Necropolita.—We consider the particulars of this case unworthy of our contemporary's columns, and very unprofitable reading for the public. We are not prepared to say that the action of the medical man in question was wrong. His position was a very painful one. It is not to be supposed that he was any party to the artistic account of the interview between him and the wretched mother who unsuspectingly consulted him.

Country Practitioner.—C. acted quite rightly, and, supposing his statement to be accurate, pushed etiquette to its extreme point. Cases of poisoning are not the sort of cases in which a medical man can always refuse to see the patient in the absence of another, or sit down without saying or doing anything.

MEDICAL ETIQUETTE.

To the Editor of THE LANCET.

SIR,—I should be glad if you would insert the following in your journal, and favour me with your opinion.

A is a medical officer to a town district of a union; B is another practitioner in the same town. A receives an order from the relieving officer to attend a patient who is verging on delirium tremens, from which he recovers, and returns to work about one week afterwards. On June 27th, A is called in a great hurry to see the patient, who had been again drinking, quarrelled with his wife, smashed everything in his house, and ended by cutting his throat. Upon A arriving, he finds B had arrived a few minutes before him. B addresses A, and says, "I suppose this is your case;" upon which A replied it was. A then attends to the wound and sews it up, B assisting him. B then retires, leaving the case in A's hands, and from whom the police receive every instruction. A continues his attendance until the 4th July, when, unbeknown to A, the patient is had up before the magistrates. A meets B the next day, and B asks him how the patient is going on, A gives him every particular, not knowing at the time that B is about to appear before the magistrates, nor did B hint it in the slightest way. The day following, A is much surprised to see through the local papers that his patient had been before the magistrates, and that B had given evidence, and was bound over to attend at the Assizes.

The question I would ask is: Whose case was this? and who was the proper person to have given evidence? Has not B committed a gross breach of professional etiquette, and received fees that should have been legitimately A's? Evidently with B, the £ *s. d.* stood in the way, and gained the mastery over gentlemanly conduct and honourable actions.—I am, Sir, yours faithfully,

Aug. 8th, 1883. A SUBSCRIBER OF TWENTY-FIVE YEARS.

*** Unless the police authorities are to blame in insisting on B's evidence being taken, we think B himself to blame, seeing that A was summoned, that he immediately attended, and that B at once resigned the case to A.—ED. L.

Nicotine.—One of the strongest arguments against the use of tobacco is the injury thereby accruing to the teeth.

A Constant Subscriber.—Such a qualification only legalises practice as a surgeon.

TITLES FOR MEDICAL MEN IN SCOTLAND.

To the Editor of THE LANCET.

SIR,—There has been some discussion lately both in the medical and lay papers on the above subject, and in your last issue you state that while at one time there were three medical baronets in Ireland, now there are none. If Ireland has been overlooked, I would like to know your opinion as to how Scotland has been treated, there having been in the latter only two medical baronetcies conferred altogether—the first in 1866, on Professor J. Y. Simpson, and the second in 1871, on Professor Robert Christison, both of whom are now dead. Of medical knights Scotland has had, I believe, only three—viz., Sir Charles Bell (who received the title when in London, and can hardly be counted), Sir Wm. Newbigging, and Sir Geo. Ballingall. Surely there is some member of the profession in Scotland yet worthy of the honour of knighthood, but it is sad to look back and remember that Syme and Spence both died as plain "Mr.'s."

I am, Sir, yours, &c.,

July 24th, 1883. SCOTUS.

*** It will be some consolation to our correspondent to reflect that one of the new baronets is a distinguished countryman of his, and holds an Aberdeen degree, so that the favour of Her Majesty is shown as much in this case to Scotland as to England.—ED. L.

WANT of space compels us to hold over *Dr. Hutcheson's* letter and other communications, in type, until next week.

Mr. M. Duggan.—Our correspondent's best vindication is the verdict of the jury.

TREATMENT OF CHOLERA.

To the Editor of THE LANCET.

SIR—Your correspondent, "C. J., in your last issue, asked whether ether had ever been used hypodermically in the treatment of cholera. I have used hypodermic injections of ether in several cases of Asiatic cholera with collapse, and also in cases which had not arrived at that stage, with well-marked benefit.

I am, Sir, your obedient servant,

Tollington-park, N., August 8th, 1883. T. HICKLING.

BEARING REINS AND BLINKERS.

A Sojourner at Lyme informs us that the use of the cruel bearing rein is in vogue in Lyme under circumstances which involve additional pain to the suffering animals. It should be abolished altogether. As regards blinkers, there are several reasons why these should be abandoned. Without them the horses are able to see the raising of the whip, and by answering thereto are saved the infliction of its stroke; their temper also is greatly improved.

Coroner.—We think the case one different from that of a practitioner seeing a patient in the ordinary way for an absent brother. It is a medico-legal one, in which a practitioner has a special and individual responsibility and trouble which cannot be transferred or shared, and in which he should have the fees.

Nemo.—It is impossible to say, as the Medical Council to be created must be satisfied with the examinations. The subjects named can be studied from the well-known English works on them.

Medicus.—The title "Physician" cannot be used on the strength of such qualification. That of "Accoucheur" is legitimate.

L.R.C.P. Ed., &c.—Twelve months at least.

THE REGENT'S CANAL.

To the Editor of THE LANCET.

SIR,—You have earned the grateful thanks of those who reside in the vicinity of the Regent's Canal by again directing attention to the disgusting and dangerous condition of this otherwise attractive and picturesque waterway. A more flagrant example of official and authoritative indifference to the interests of public health on the part of the "powers that be" could not be well imagined.

In the local and daily press the insanitary state of this "disgusting ditch" has been repeatedly proclaimed. Professor Wanklyn has given it as his opinion that the canal-water "is simply sewage containing 3·20 of free ammonia and 2·76 of albuminoid ammonia." Dr. Bartlett examined the effluent water from the Zoological Gardens drain, which discharges into this "open sewer," and found that it contained "all the urea and the greater part of the fæcal matters in solution or suspension;" and yet with bitter irony a local authority not long since declared in justification of the Zoological drain that this objectionable addition to the canal-water rather improved its composition, so bad was it already. The publication of these facts some years ago was pooh-poohed by the parochial officials, and regarded by the Zoological Society somewhat in the light of a malicious attack; the natural result has been that things have gone from bad to worse, and during the summer heat the additional evaporation concentrates the filth and offensive emanations, often impregnated with an ammoniacal odour, are not unfrequently detected by those who frequent the neighbourhood of the canal. Surely it is high time a Local Government Board inspector should investigate the complaint, and speedily avert a potential, if not an actual, source of danger to the health of this otherwise salubrious locality.

I am, Sir, yours, &c.,

W. J. COLLINS, M.D., B.S., B.Sc. Lond.

Albert-terrace, Gloucester-gate, N.W.,
August 6th, 1883.

Enquirer.—Such cases of precedence are not generally treated of in court guides, but we apprehend that a graduate of a university would precede a solicitor.

A. L.—The custom varies. Usually beer is included in the board; but washing is subject to special contract.

GUARDIANS OF THE RATES OR OF THE POOR?

To the Editor of THE LANCET.

SIR,—The following case will answer the above question:—R. E——, aged eighteen, was delivered, after a most difficult labour, of a male child on the 18th ult. She was absolutely destitute. The room in which she was confined contained no furniture except a bedstead and a chair. The bedstead where she lay was covered by a few cloths, and she was covered by a chemise and a sheet, and this, too, when the weather was as cold as on the 1st of January of this year. The relieving officer visited her and gave her 2*s.*, but refused to provide anything else for her. I brought the matter to the notice of the Board of Guardians, and they informed me that their relieving officer had not at all failed in the discharge of his duties in this case. If the poor creature were a pig she could not have been treated worse than she was, and she certainly would have felt the painfulness of her position less.

I am, Sir, yours truly,

August 4th, 1883. J. T. S.

Mr. F. Haesler.—1. Yes, so far as we know.—2. Yes.—3. We are not aware.

Indignation.—We have been unable to meet with a report of the case.

GONORRHŒAL RHEUMATISM.

To the Editor of THE LANCET.

SIR,—Could you or any of your readers kindly give me the best authorities on the above. I have got a bad case in which the suffering is intense, and has been so for seven weeks. I have tried most of the remedies, without much result.—I am, Sir, yours truly,

August 7th, 1883. SUBSCRIBER.

CORRIGENDA.—In Dr. Norris's article in our last number, page 178, line 27 from end, for "The destructive influence of the corpuscles," read "The destructive influence on the corpuscles;" same column, line 22 from top, insert "in" after "as."—In Mr. Noble Smith's article, page 184, line 14, for "there," read *thin*.—By a printer's error, the number of members of the British Medical Association was given in our last issue as 1050, instead of 10,050.

COMMUNICATIONS not noticed in our present number will receive attention in our next.

COMMUNICATIONS, LETTERS, &c., have been received from—Professor Struthers, Aberdeen; Professor Norris, Birmingham; Dr. H. Blanc, Bombay; Dr. H. V. Carter, Bombay; Dr. Steavenson, London; Mr. Butlin, London; Dr. Ewing Mears, Philadelphia; Mr. Noble Smith, London; Mr. B. Duke, Clapham; Dr. Cullimore, London; Dr. Austin, Tongue; Mr. Schollick, Nottingham; Dr. H. Donkin, London; Mr. J. J. Johnston, Bangor, Co. Down; Mr. H. A. Lawton, Poole; Mr. G. A. Batchelor, Venterstad; Mr. Roocroft, Wigan; Mr. J. R. White, Brentwood; Dr. A. Bennett, Stawell, Victoria; Mr. Freeman, Bath; Mr. Dutch; Dr. Keep, Cupar; Mr. W. H. Hart, Tunbridge; Mr. Carson, Liverpool; Dr. W. J. Collins, London; Surgeon-Major Gray; Dr. Ratton, Bombay; Dr. M'Call Anderson, Glasgow; Mr. E. H. Lindsay, Dublin; Dr. G. C. Roy; Dr. Campbell Clark, Bothwell; Mr. A. Pierson; Messrs. May and Co., Malvern; Mr. Edgelow, Tembrey; Mr. Griffith, Moradabad; Mr. Richardson, Huddersfield; Dr. Dobell, Bournemouth; Messrs. Robertson and Scott, Edinburgh; Mr. Gurner, London; Messrs. Crossley and Co., London; Mr. Glassington, London; Mr. Moir, Glasgow; Mr. Stork, Bridgwater; Messrs. Smith and Son, Dublin; Dr. Wright, Derby; Mr. Luck, West Maling; Mr. Beamish, Cork; Mr. Parsons, Hastings; Messrs. Wagstaff and Co., Holloway; Mr. Bray, Hastings; Mr. Barns, Rotherham; Mr. Robinson, Denbigh; Mr. Burgess, Manchester; Mr. Eales, Plymouth; Mr. Birchall, Liverpool; Mr. Russell, Liverpool; Mr. T. Cooke, London; Mr. Carshaw, London; Mr. Ballance, London; Mr. A. W. Stirling, Stapleton; Dr. C. F. Knight, Dublin; Dr. J. Chapman; Dr. Covernton, Ontario; Dr. Jas. Rogers, Greenbank; Dr. Jas. Adams, Ashburton; Captain Johnston; Mr. Boreham, Tunbridge; Mr. Beckton; Mr. T. H. Waller, London; Mr. Pugin Thornton, London; Mr. Griffith, Islington; Mr. Richmond, Chester; Mr. Lairitz, London; Messrs. Wright and Co., Birmingham; Dr. Cooke, Sheffield; Dr. Eberle, Thirsk; Mr. Wise, Leytonstone; Mr. Mason, Sudbury; Mr. Thorn, Norwich; Mr. Russell, Liverpool; Mrs. Chote, Forest-hill; Mr. Hickisson, London; Miss Beresford, Shrewsbury; Mrs. Houndsfield, Bridlington; Messrs. Rockliffe Brothers, Liverpool; Mrs. Howell, Manchester; Mr. T. Edis; Medicus, Nottingham; J. W., St. Moritz; Physician; Sans Souci; Bistouri; A. B. D., York; F.R.S., Droitwich; Indignation; Country Practitioner; A Constant Subscriber; A Subscriber of Twenty-five Years; Medicus; A British Practitioner Resident in the States; A Witness to Character; J. T. S.; Medicus, Hull; Eskdale; Subscriber; A Subscriber; &c., &c.

LETTERS, *each with enclosure*, are also acknowledged from—Rev. A. J. D. D'Orsey; Mr. George, Liverpool; Mr. Young, Edinburgh; Dr. M'Neill, Tiverton; Messrs. Byles and Sons, Bradford; Mr. Flint, Westgate-on-Sea; Dr. Fitzmaurice, Linkinhorne; Messrs. Sandford and Son, Sandy; Mr. Coates; Dr. Horton, Newcastle; Mr. Woodland, London; Dr. Stokes, Wycombe; Dr. Bedford, Sheffield; Mr. Coke, Ashford; Mr. Hankin, St. Ives; Mr. Elliott, Carlisle; Mr. Fielding, Shrewsbury; Dr. Medham, Gloucester; Dr. Duckot, Great Yarmouth; Messrs. Harvey and Reynolds, Leeds; Messrs. E. Smith and Co., London; Mr. Abbott, Braintree; Dr. Cooke, Great Malvern; Mr. Shakland, Kensington; Mr. Caton, Liverpool; Mr. Fox, Bristol; Messrs. Douglas and Ormrod, Workington; Messrs. Macniven and Cameron, Edinburgh; Mr. Pratt, London; Dr. Redwood, Rhymney; Mr. Rundle, Alston; Mr. Bray, Hastings; Mr. Heffernan, Widnes; Dr. Dowse, London; Mrs. Walker, Chesterfield; Mr. Brett, Leeds; Mr. Meatham; M.B., Cardigan; Miss H., Leominster; G. H. W., Wigan; C. H., Bishop's Waltham; R. S. S., Hollinwood; J. C., Scunthorpe; Beta, Calshetter; Medicus, Guy's Hospital; Immediate, Yorkshire; M.D., London; Alpha, New-cross; Beta; E. B.; X. Z.; A. E. T., Darlington; E. H. B., Ashford; Medicus, Uxbridge; H. S., Edinburgh; M.R.C.S., Seacombe; L. M., London; Orez, Edinburgh; L. A.; A. Z.; Medicus, Leeds; C. D., Hartlepool; H. E.; H. S. B., Enfield; T. B., Birmingham; Principal, St. Leonards; &c., &c.

Health Journal, Ballymoney Free Press, Philanthropist, Liverpool Daily Post, Liverpool Courier, Irish Times, Sutton, Coldfield, and Erdington Times, Englishman, Scientific American, &c., have been received.

Medical Diary for the ensuing Week.

Monday, August 13.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M. each day, and at the same hour.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M. each day, and at the same hour.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
ST. MARK'S HOSPITAL.—Operations, 2 P.M.; on Tuesday, 9 A.M.
HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M., and on Thursday at the same hour.

Tuesday, August 14.

GUY'S HOSPITAL.—Operations, 1½ P.M., and on Friday at the same hour.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 2.30 P.M.

Wednesday, August 15.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.
MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.—Ophthalmic Operations on Tuesdays and Thursdays, at 1.30 P.M.
ST. MARY'S HOSPITAL.—Operations, 1½ P.M.
ST. THOMAS'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.
LONDON HOSPITAL.—Operations, 2 P.M., and on Thursday and Saturday at the same hour.
GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2½ P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M., and on Saturday at the same hour.—Skin Department: 1.45 P.M., and on Saturday at 9.15 A.M.

Thursday, August 16.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—1½ P.M. Surgical Consultations.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M., and on Friday at the same hour.
NORTH-WEST LONDON HOSPITAL.—Operations, 2½ P.M.

Friday, August 17.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1½ P.M.
ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 2 P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
KING'S COLLEGE HOSPITAL.—Operations, 2 P.M.

Saturday, August 18.

KING'S COLLEGE HOSPITAL.—Operations, 1 P.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M.
ROYAL COLLEGE OF PHYSICIANS OF LONDON.—4 P.M. Bradshawe Lecture: Dr. J. Wickham Legg, "On Cardiac Aneurisms."

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